

Clarity and Complexity: Designing for an Educational Community

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1987

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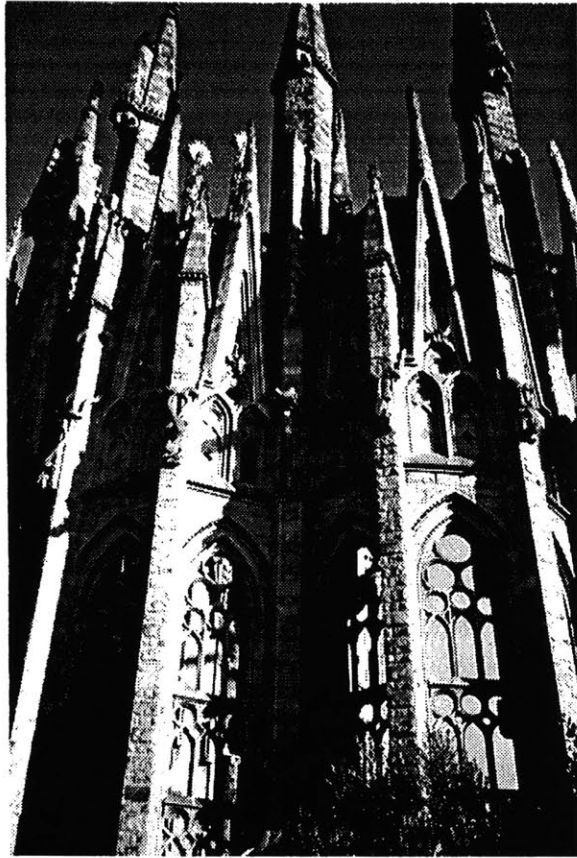


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Evolution and Metamorphosis of Pre-existent Structures:
Lasting Change, Lazarus' Memory

by Richard Keith Olson

**SUBMITTED TO THE DEPARTMENT OF ARCHITECTURE
IN PARTIAL FULFILLMENT FOR THE DEGREE OF MASTER OF ARCHITECTURE
6 MAY 1994**

ABSTRACT

As society perpetually evolves, retention of selected pre-existent building fragments (structure and inhabitation, form and use) provides necessary continuity to affirm cultural and individual identity. Within this framework of continuity, radical transformation may occur, in line with the evolution of society. This project examines the necessity for such metamorphoses, working within an existing hotel building in the Boston Back Bay to design guest residences for visiting M.I.T. faculty.

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Thesis Supervisor: Fernando Domeyko

Title: Lecturer

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John 11:38 Jesus, once more deeply moved, came to the tomb (of Lazarus). It was a cave with a stone across the entrance. *"Take the stone away,"* he said.

John 11:43 When he had said this, Jesus called in a loud voice, *"Lazarus, come out!"*

John 11:44 The dead man came out, his hands and feet wrapped with strips of linen, and a cloth wrapped around his face.

John 11:45 Jesus said to them, *"take off the grave clothes and let him go."*

Introduction

left: Long exposure of project site at night.

Metamorphosis is culture; culture is continuously changing with society. The building environment is similarly undergoing continuous transformation, being closely associated with culture. For effective transformation to occur, for transformation to be in line with society, cities and their constitutive buildings must maintain continuity both spatially and temporally with what has preceded. *Successful* development hinges upon society's needs (for new housing, for example, or better infrastructure), and occurs

precisely as an outgrowth of previous development. At the same time, incorporation of present-day technology and social awareness coupled with planning for the future provide direction and meaning to the transformation.

As this process of development suggests, an appropriate approach toward transformation of cities would sometimes partially include pre-existing conditions, fragments of artifacts in the built environment. Unlike traditional narrow concepts of incorporation (such as rehabilitation, renovation, et. al.), which preclude abandonment, the approach taken here will instead guide a continuously transforming building environment, in which change is adopted in line with transforming social organizations.

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What constitutes an effective strategy? There are at least three distinct approaches to conversion of pre-existent structures. Conventionally, such approaches go by varying names; adaptive reuse, rehabilitation, redevelopment, renovation, preservation and restoration are just a few.

To distinguish between fundamental differences, descriptions accompany a general term used to catalog each of three approaches, and then a specific example is cited to provide an illustration.

Renovation establishes new inhabitation based on a specific site and program, predicated on the reallocation of space within an existing structure such as the Children's Museum, Boston.

Preservation, in a similar fashion, calls for a return to an antecedent form, as in the case of Ellis Island, or use (Colonial Williamsburg) dictated by the original buildings. Both of these design approaches, however, act as interruptions in the time-flow process of change, having been wielded upon abandoned or forgotten environments.

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Recent efforts in Boston suggest that preservation is the primary goal in reusing buildings; however, to adopt this method as a standard is far too limiting, especially where tight economic conditions prevail. The preservation agenda (maintaining the status quo) therefore works against progress.

Instead, the focus of this thesis will be reinhabitation based on a third process: *temporal transformation*. In essence, designs incorporating temporal transformation undergo continuous adaptation and metamorphosis, acknowledging the temporal context and expanding upon it in radical transformation. This document holds out the value, even the necessity to incorporate rather than destroy fragments so as to enrich experience and enliven cultural memory.

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All buildings (not just historic record buildings) in fact have a certain “embodiment value”, being made up of precious materials and being artifacts of irreproducible or expensive craftsmanship. “Embodiment value”, usually thought of in monetary terms, equates the environmental impact of construction (a topic of increasing concern) by weighing the value of existing material against the replacement cost of new construction.

The long-term presence of existing structures

indicates the necessity to see buildings and even cities as equally long-term investments. Recent projects such as Commercial Wharf in Boston show progress in this direction by initiating leases from the city to developers in order to encourage reuse of buildings. Additionally, other cost efficiency incentives such as special financing, tax breaks, and reduced acquisition costs make adaptive reuse especially desirable.

Even such economic transformation comes about as a result of superimposing new and old. Present economic reality points toward rapidly changing needs and functions (with respect to building program)]. However continued economic uncertainty coupled with fast-paced technological advances suggest high-intensity utilization of existing resources rather than the specificity and diffusion of resources inherent in completely new development. So-called temporary building schemes outlive their occupants in most cases. This argument, however, for 'continued presence' only represents the economic aspect of a need for artifacts. In order for continuous transformation

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to be fully understood, it is necessary to weigh not only the tangible loss of irreplaceable resources and artistry, but also the intangible loss of collective memory embodied in artifacts.

While renovation and restoration may unwittingly destroy the thread of memory, temporal transformation relies on the life embodied in an architectural artifact by virtue of its uninterrupted presence as a useful, inhabited structure. Implicitly this requires a retention of some fragments of the original building structure and inhabitation, although not the building itself. The extent to which an artifact can be reduced and the means of enabling its identification are the subject of this study.

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I use the story of Lazarus to illustrate this intangible component of temporal transformation. In his miraculous rebirth, Lazarus awakens to his former self, and yet simultaneously prepares to embark on a new life. Physically, he remains unchanged, but in fact he has been radically transformed spiritually. His abandoned tomb in turn serves as a collective reminder, an element in

the shared memory of those who witness his resurrection.

One could also consider the writing of this thesis. Through continuous reworkings of the text and illustrations, the current form is arrived upon, a reflection of both the original intent and a clear result of the process of research. At times the complete framework is shuffled, even reinvented; but in the end fragments of the initial proposal still inhabit the text.

In the same way, buildings occupy our consciousness, forming collective memories — stories about the identities of places — regarding physical and social spaces and events. Take the example of Quincy Market in Boston. With the original grit of its earlier days swept clean, Faneuil Hall Marketplace still retains its identity as a market, even though the specificities of the prior use have been erased. The marks of age contrasted with the transparency of new use all exist within the abstract framework of the major structure and the organization of the shops themselves.

The accumulated growth of existing buildings serves to illumine the past while simultaneously promoting a productive future. In Rome, for instance, the presence of historic monuments does not in any way inhibit the transformation of these structures, often for functions completely unrelated to the original buildings. This process of regenerative adaptation (outlined by Aldo Rossi and documented regularly in publications such as *Metamorfosi*) actually assures the continued presence of these artifacts well into the future.

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Successful redesign highlights the presence of new-in-old, rather than hiding it through reconstructed façades and interiors; and effective transformations suggest efficient directions for future growth. Existing facilities can and do complement new facilities.

Temporal transformation essentially acts as a continuous extension from existing memorable features of a place, confirming an established identity, while relying on traits which order the

use and spatial logic of a pre-existent structure. These traits naturally differ depending upon the particular site and program. The examples analyzed later will illustrate elements of this process, in order to guide the design phase of the thesis.

It is the intent of this document to provide a hopeful approach for reuse of existing buildings, the hope being that with thoughtful insight, (re)inhabitation will be regarded with critical intent in order to transform pre-existing conditions with utmost concern for spatial logic and social need.

Method

Exploration of the temporal transformation occurs here in two parts: one provides conceptual background through the critical examination of case studies in order to determine the essential traits of effective redesign. The other outlines the development of the design of a specific site, while incorporating these traits.

The critical studies consist of three projects in Boston and four in Barcelona, all of which can be commented upon through first-hand documentation by the author. They were chosen to inform positively and negatively the values and strategies of existing transformation. Church Court in Boston on the Charles River contains within it a connection between an older and newer occupations. This connecting space similarly calls out the inherent potential of the juxtaposition of past and present. The I.C.A. on Boylston Street in Boston is a project in which the original artifact and its use are still very clear, the original building facade acting as a threshold or

cover for the transformed facilities behind it. 360 Newbury Street (the Tower Records building) in Boston is presented as a case where the transformation of the site occurs as a realization of present needs using an existing structure.

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The Olympic/World Expo redevelopment in Barcelona is used as an example where revitalization occurs within an existing city framework. The object of this particular critical study is of course not to understand the city as a whole, but rather to glean lessons from the decisions made in designing selected parts of the city. In each of the critical studies, first context is examined. Next the design strategy and potential for transformation are developed. Finally, individual description of the elements at work (new and old) and the interaction of those elements is described.

The true test of this thesis is the resilience of the identifiable architectural frameworks within which each temporal increment is essentially rooted, having been established concurrently with

the design. This term “framework” refers to a set of qualities governing the form or social role of an architectural program in a built environment. Individual in nature, each framework comprises a logical understanding of an artifact.

The approach assess simultaneity of past and present, as well as continuity of fragments of structure and/or inhabitation. In the context of the city fabric, visible recognition allows the project to be read as a succession of previous uses and occupants, with the potential for continued adaptation. Simultaneity requires that these frameworks be layered to show past, present and future. Continuity suggests that the building contains within it certain functions or spatial experiences which are permanent or transferrable between old and new.

Design Overview:

The design portion considers an existing artifact and its environment in order to project the potential extension of its present use and form. The outline of the development of the design specifically demonstrates discovery of the different major forces acting on the site during the design process in order to respond to the temporal frameworks recognizable in the design itself. These frameworks comprise the specific issues governing the actual design. These should not be misconstrued as mere cause-and-effect observations. In fact analysis would appear to be entirely different from the design. Analysis actually exposed the elements which remain through the final design, and opened avenues for exploration.

Although the temporal transformation approach could apply to multiple sites and programs, the selection for this example was limited by specific criteria which would allow the transformation to

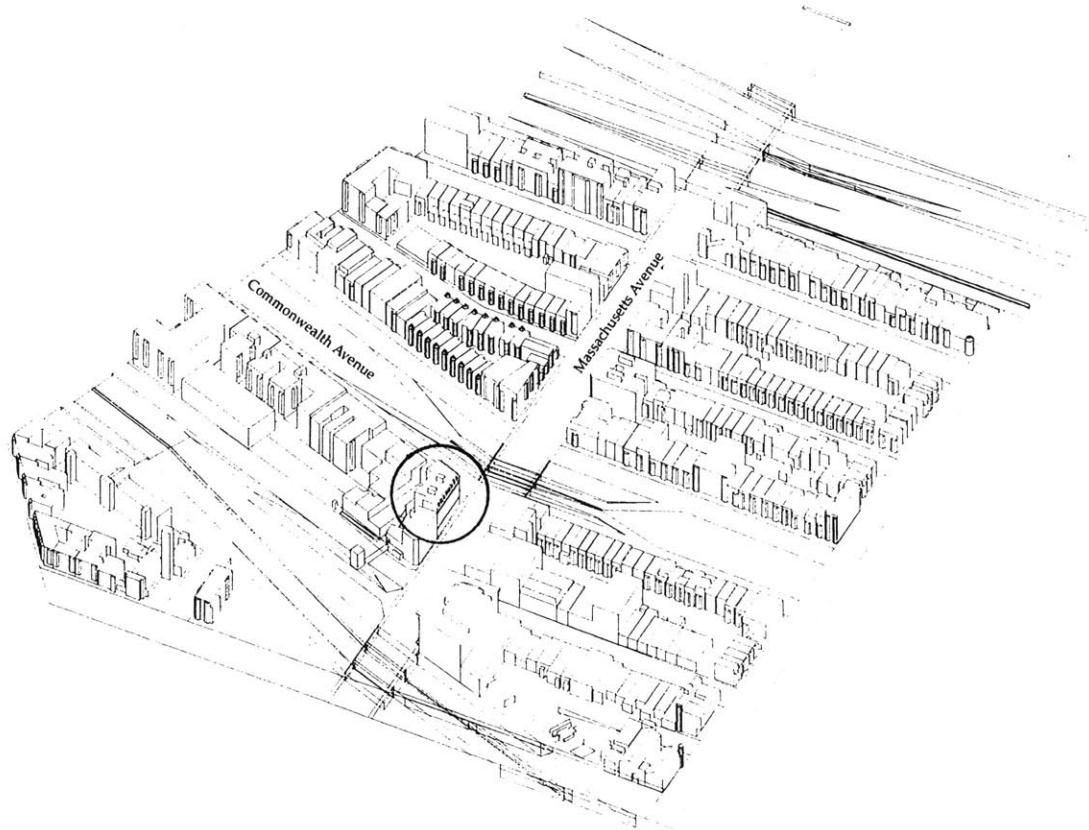
take place. The site chosen for the design is 370 Commonwealth Avenue¹, currently used as a hotel, and includes the courtyard and alley at the rear. It is located on the southwest corner of the intersection of Massachusetts Avenue and Commonwealth Avenue in Boston. Selection required the potential to extend beyond the boundaries of the existing building and the ability to project a recognizable function as read through the internal and external features of the building. The structure itself has the advantage of being identifiable as a hotel, and the overall site allows a sufficient degree of flexibility for expansion, both outward and upward.

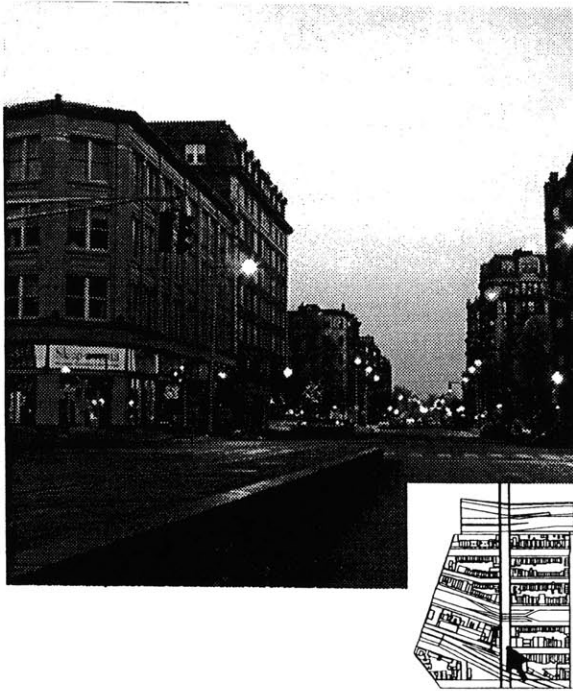
- 24** Although research does not depend on the selection of the site or program, the outcome of the design will be a direct reflection of the initial selection of both these factors; for this reason, having a specific program is critical, but the choice of program is flexible. Two factors are important: modest scale and complexity, and multivalent

1. Name withheld by request.

transformation affecting all levels: the individual user, the organization housed within the given building, and the community of which it is part. The initial phase of the program provides guest residences for visiting faculty of M.I.T. The program transforms the existing hotel to include the residences as well as an auditorium space which serves as exhibit space and a place for chamber concerts and presentations. Additionally, modifications include the addition of a restaurant and incorporation of the ground floor retail areas.

This work is presented as a series of design modifications, or basically as incremental steps in a refinement process, which ultimately generates understanding of the building itself. The goal of the design is to reach a precise understanding of temporal transformation as a design approach.





*left: General view of site (3D AUTOCAD model)
from southeast.*

above: View of site to north along Mass Ave.

Site

The site of this thesis is the southwest corner of the intersection between Massachusetts Avenue and Commonwealth Avenue, having a north-south orientation roughly perpendicular to Comm Ave. The area in the vicinity of 370 Commonwealth, the Back Bay, is itself the product of ongoing urban transformative forces. As early as 1814, the first traces of urban scale features began to shape this region of the city, when the Cross Dam was built (corresponding to present-day Massachusetts Avenue). Tidal flats formed by it and the Mill Dam (Beacon Street) were considered unhealthy and unsightly, so the mill activity was transplanted gradually with the 450-acre filling of this area, from Arlington Street west to the Fens, and along the Mill Dam to the north and along the Albany Rail Lines (Massachusetts Turnpike) to the south. Thus a speculative boom was born out of the desire to beautify an area adjacent to the city.





left: View of back of site from south.

above: View of back of site from south, including surroundings.

The acknowledged purpose of development here was in fact social distinction and snobbery, which residences surrounding the site provided. Row houses were built with comfort and elegant living conditions in mind. Commonwealth Avenue was in fact one of two (Beacon Street being the other) roads away from Beacon Hill which were the most desirable, and contained homes belonging in large part to the newly-established wealthy. It (Comm Ave) was modelled in the French style as a wide (200' + 20' setbacks on either side) boulevard/promenade at the suggestion of architect Arthur Gilman.

Socially and physically, the area was transformed still further during this century. Horse-drawn carriages were supplanted by cars, eventually forcing the underpass beneath Mass. Ave. directly in front of the site. De-gentrification began immediately following the depression and occurred mainly as the result of developers renovating estates for apartments or colleges converting houses to dormitories or offices.

The corner lot itself was sold in the same piecemeal

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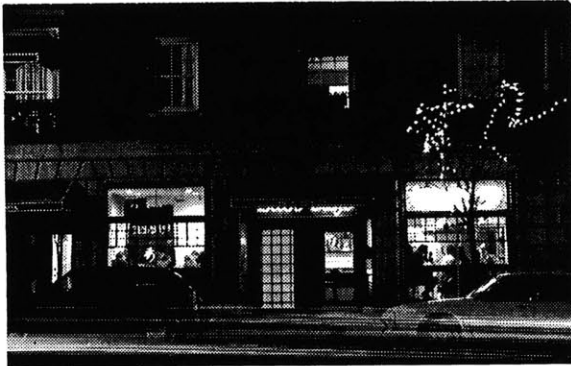
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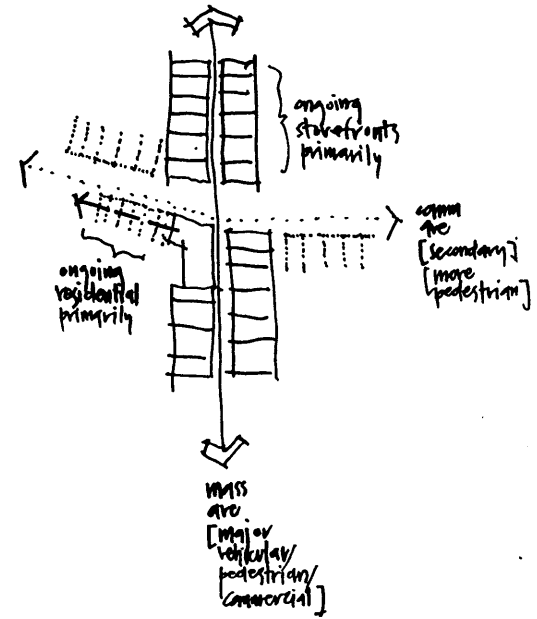
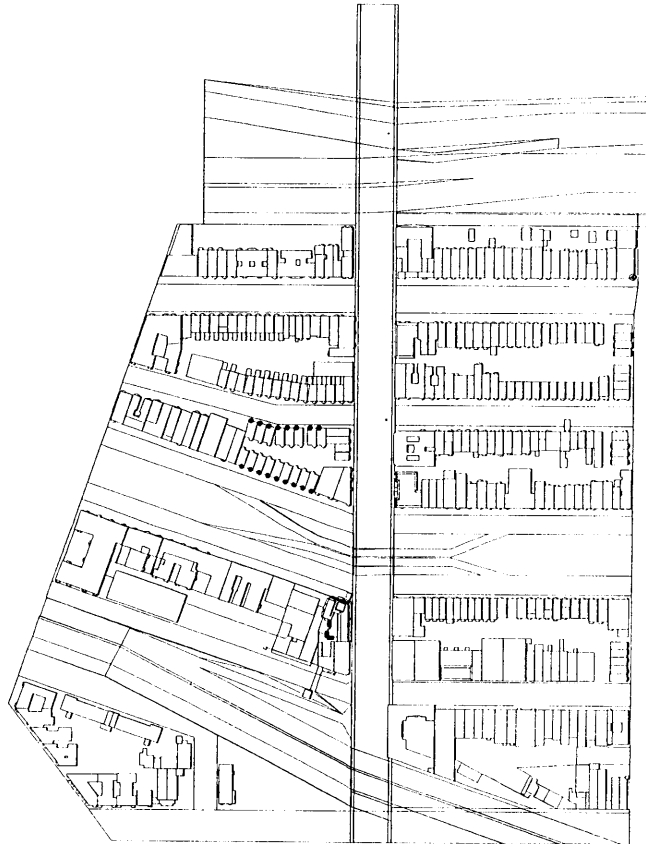
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fashion as the other lots in the Back Bay. Initially, the site was occupied by two four-story row houses owned by William Avery (c. 1888). These in turn were purchased and replaced by the single nine-story residential hotel in 1925 and present there today. The present proposal seeks to reconcile its present role as a long-term residence for visiting faculty (and also businessmen) and its focal nature (drawing residents, students, and visitors from nearby Newbury Street, Massachusetts Avenue, and Kenmore Square).

left: Closeup of tunnel to loading area behind hotel.

above: Street facade of hotel at night.

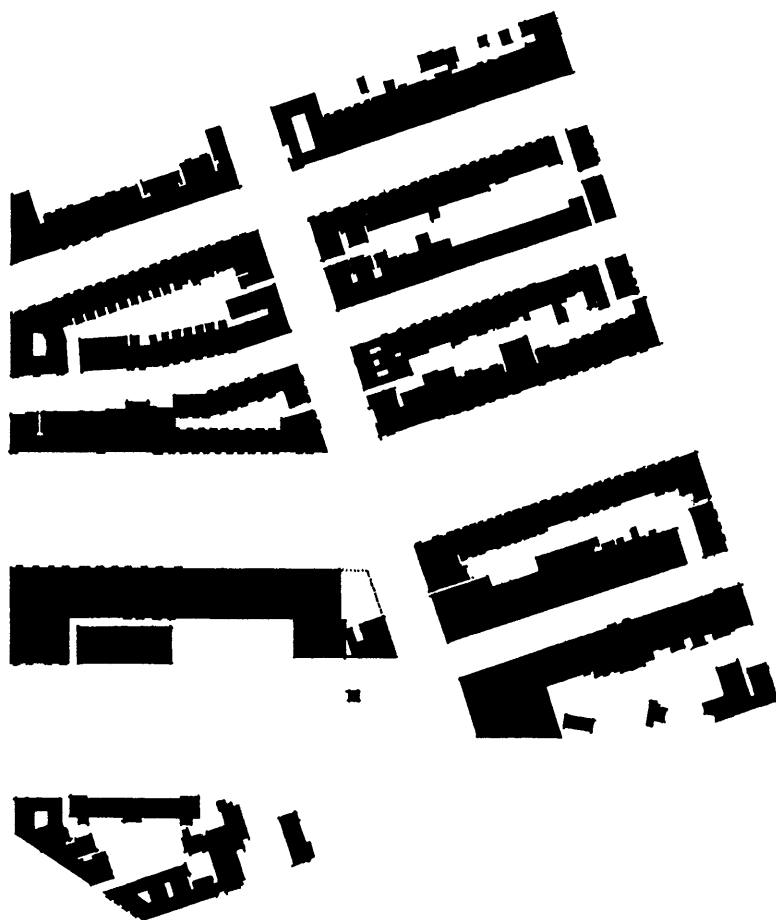


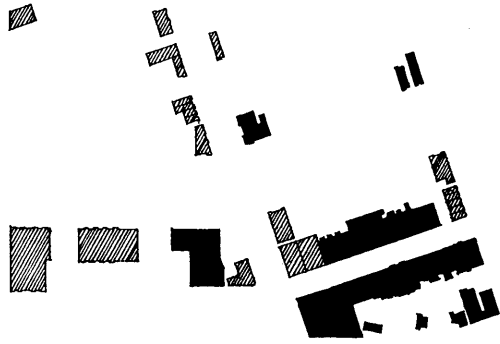
far left: Plan view of site (AUTOCAD, 1"=500').

left, top: Site diagram sketch.

right: Building massing showing cast shadows.





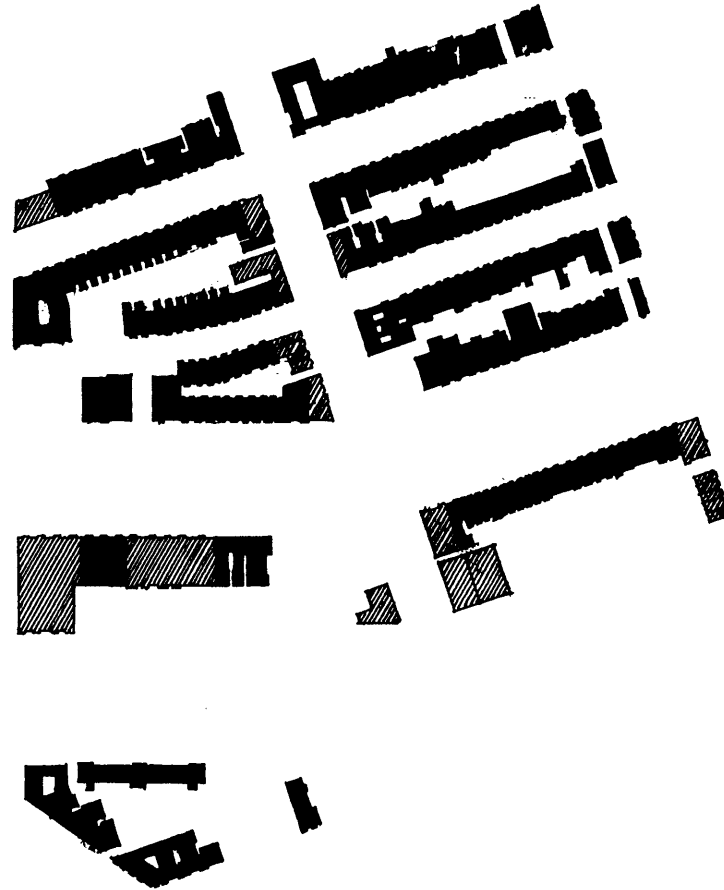


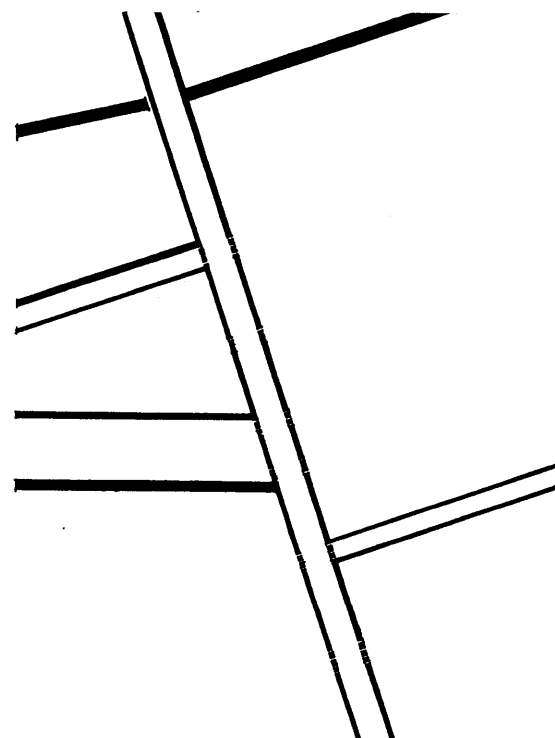
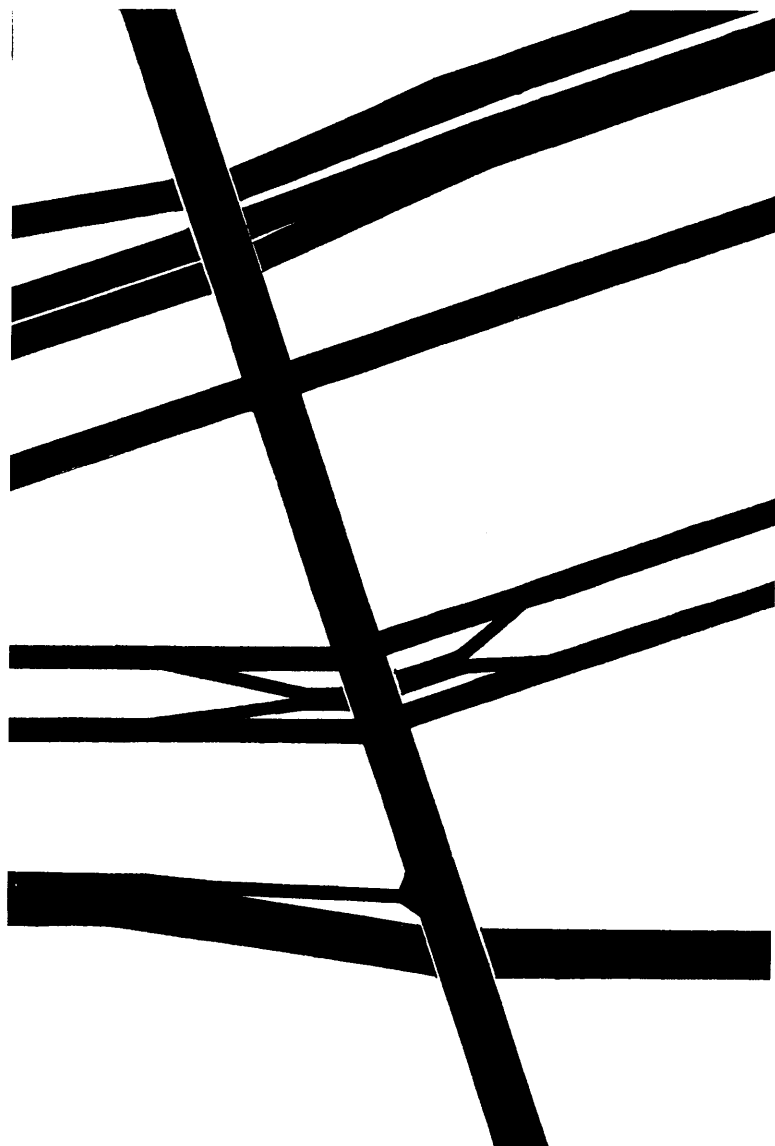
far left: Diagram showing built portion of site.

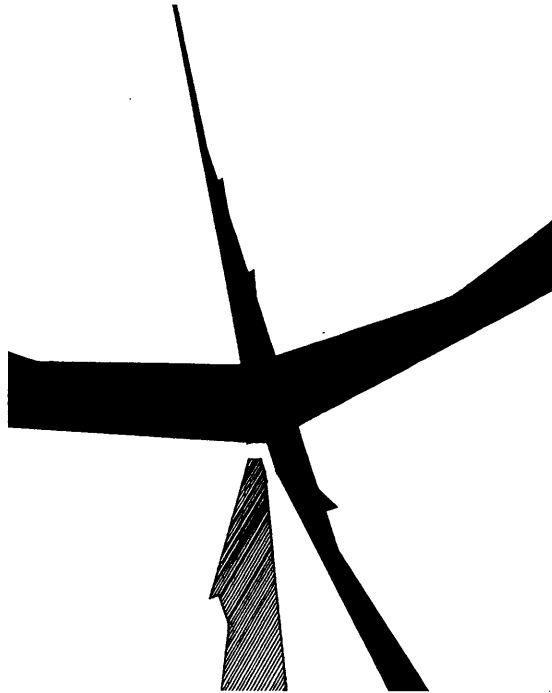
left: Diagram showing all converted buildings in the area (roughly 1 in 5).

above: Retail and commercial buildings (hatched are combination).

right: Residential buildings (hatched are combination).





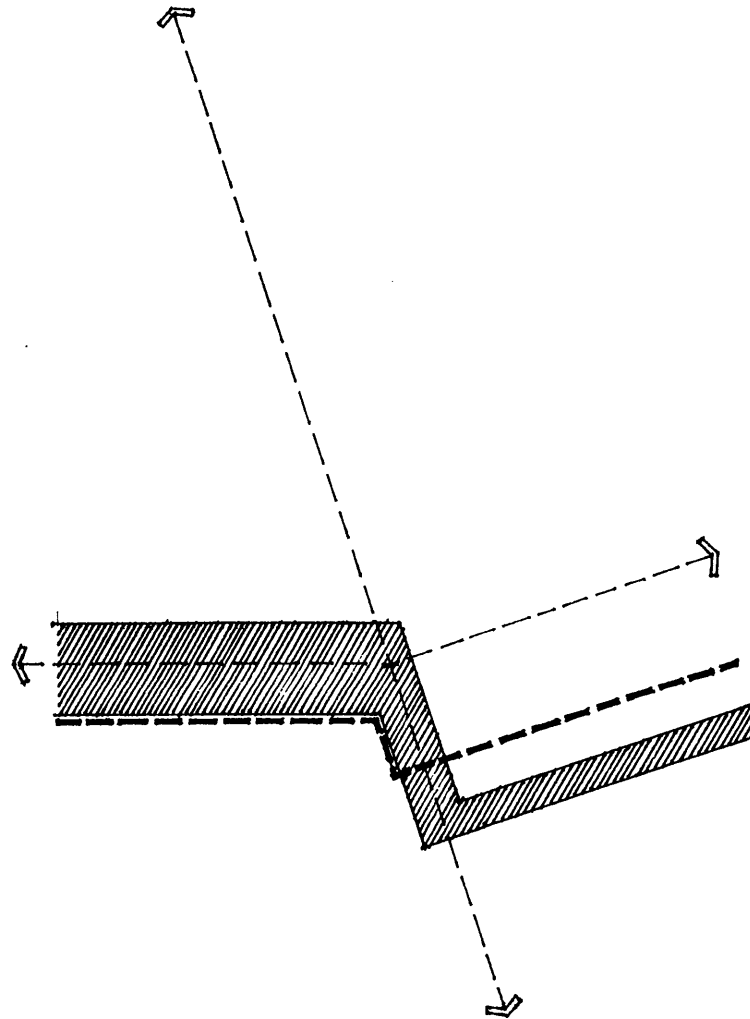


far left: Major vehicular traffic.

left: Major pedestrian traffic.

above: Diagram of site visibility (hatched represents visibility from back).

right: Diagram of site boundaries. Hatching represents perceived edge of Back Bay (CommAve/Newbury).





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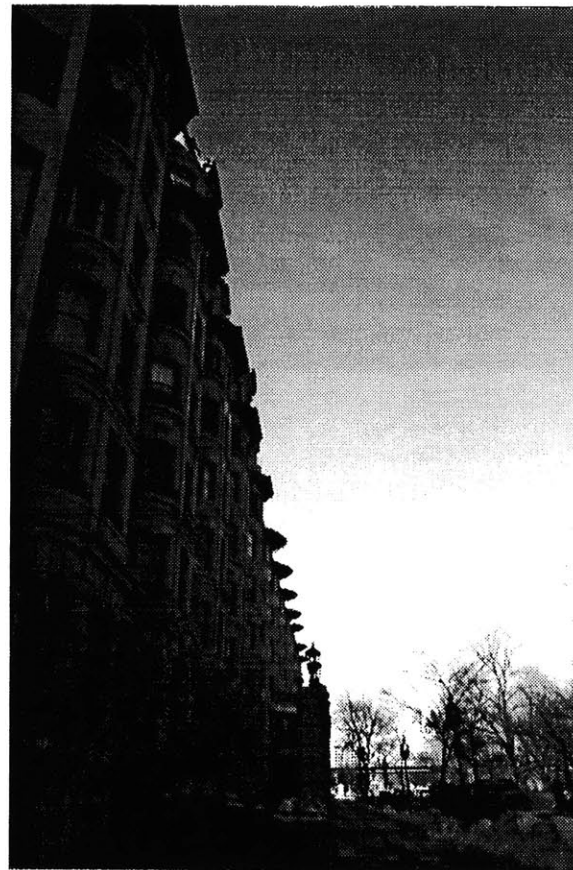


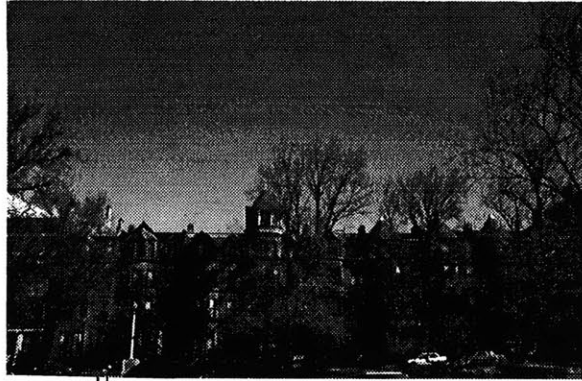
far left: M.I.T. visible from corner of site.

left: View of Mass Ave (site in middle).

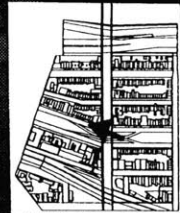
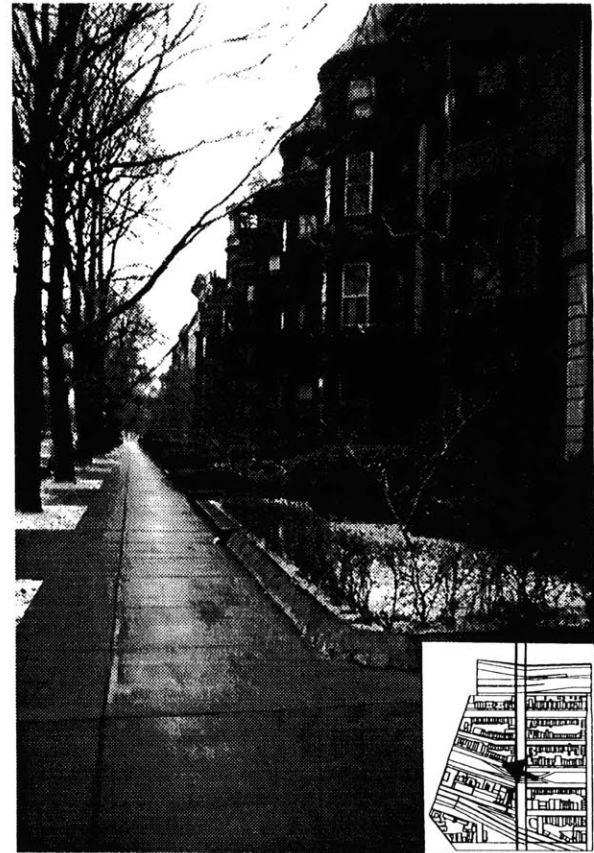
above: Comm Ave (change in scale).

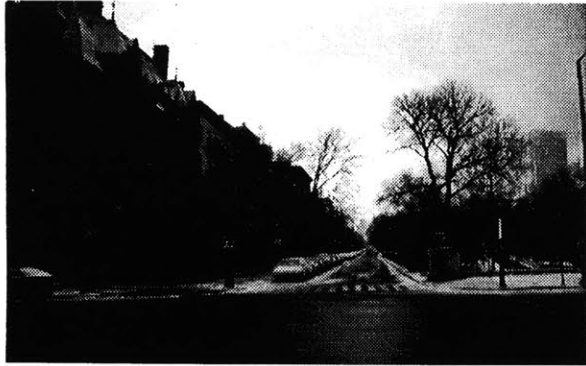
right: South side of Comm Ave.





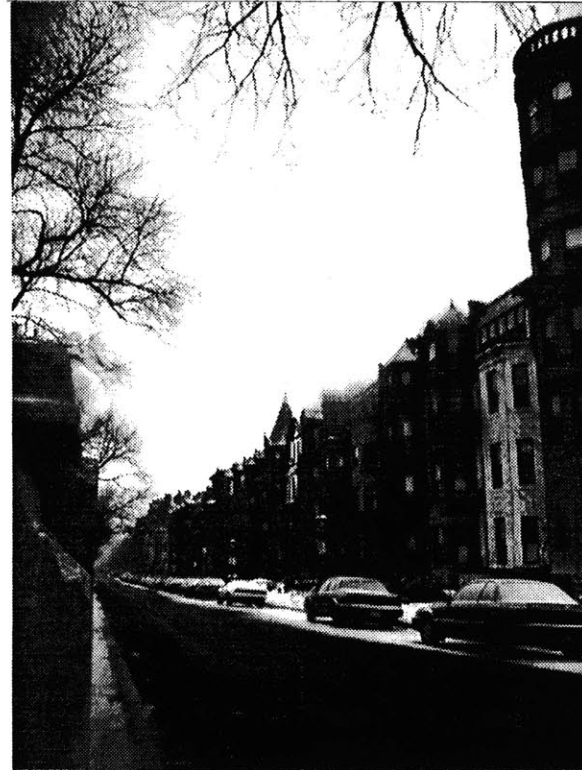
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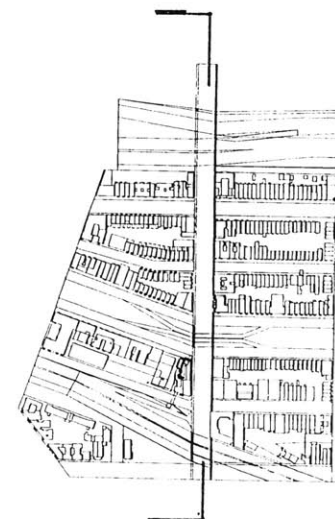
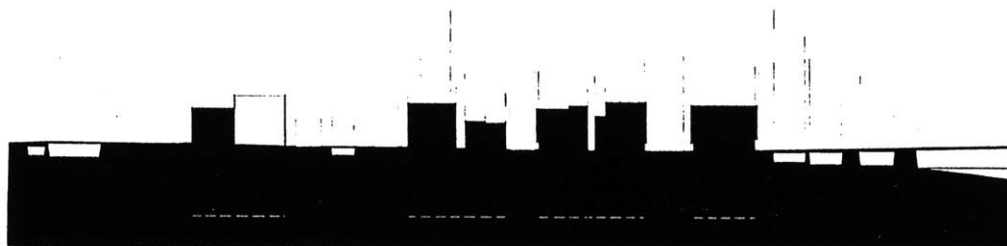




facing page: Two views of Comm Ave opposite site.

this page: Two views along Comm Ave.





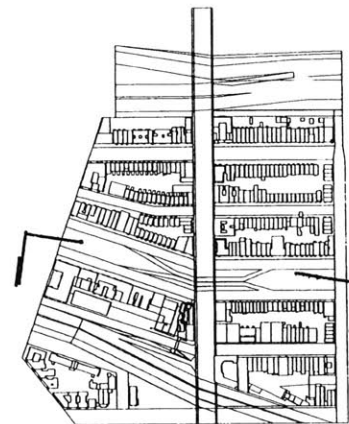
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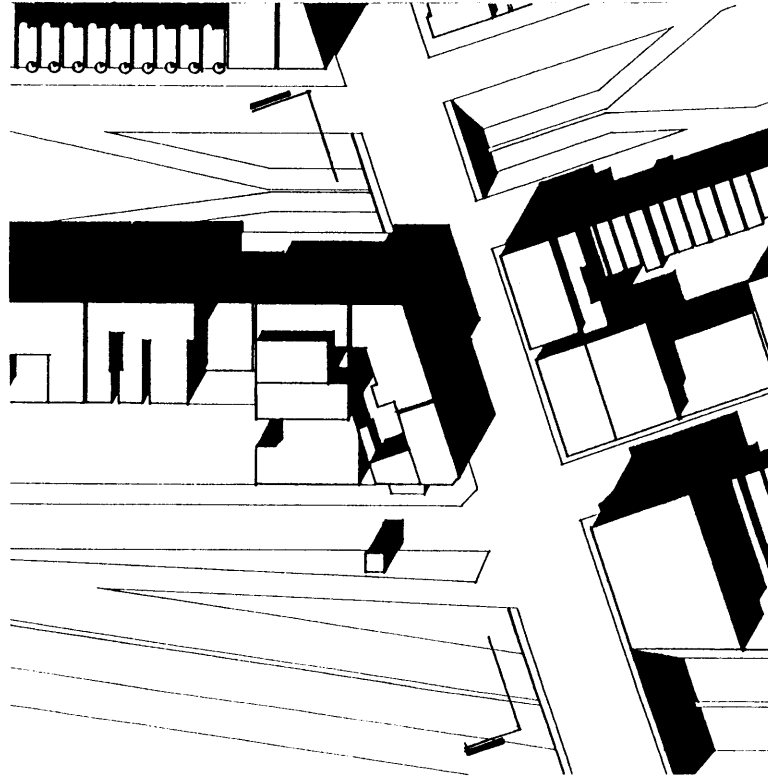


top: Site sections (1"=400').

bottom: Comm Ave views.







facing: Closer views of site along Comm Ave.

right, top: Site plan (1"=200').

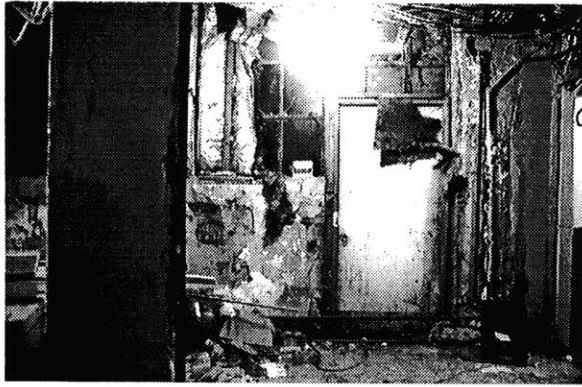
right, bottom: Site section (1"=200').





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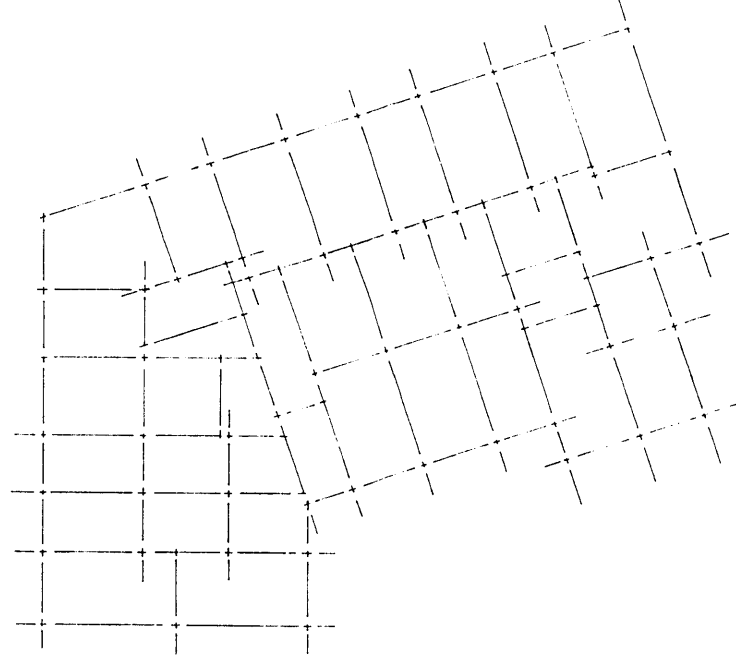
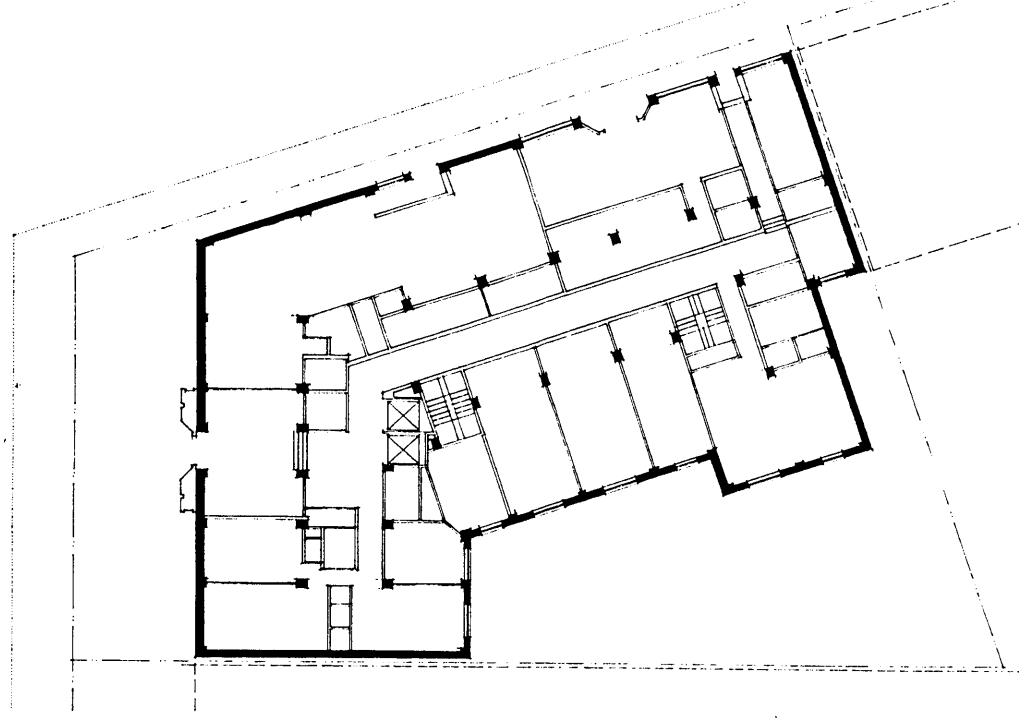


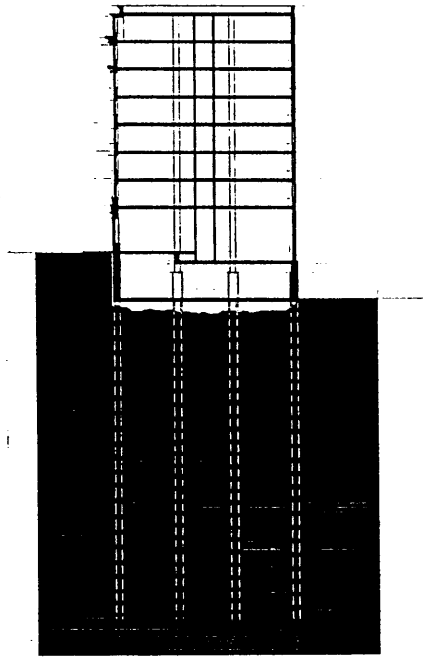


facing page: Ceiling deterioration in basement.

this page: Wall deterioration in basement.





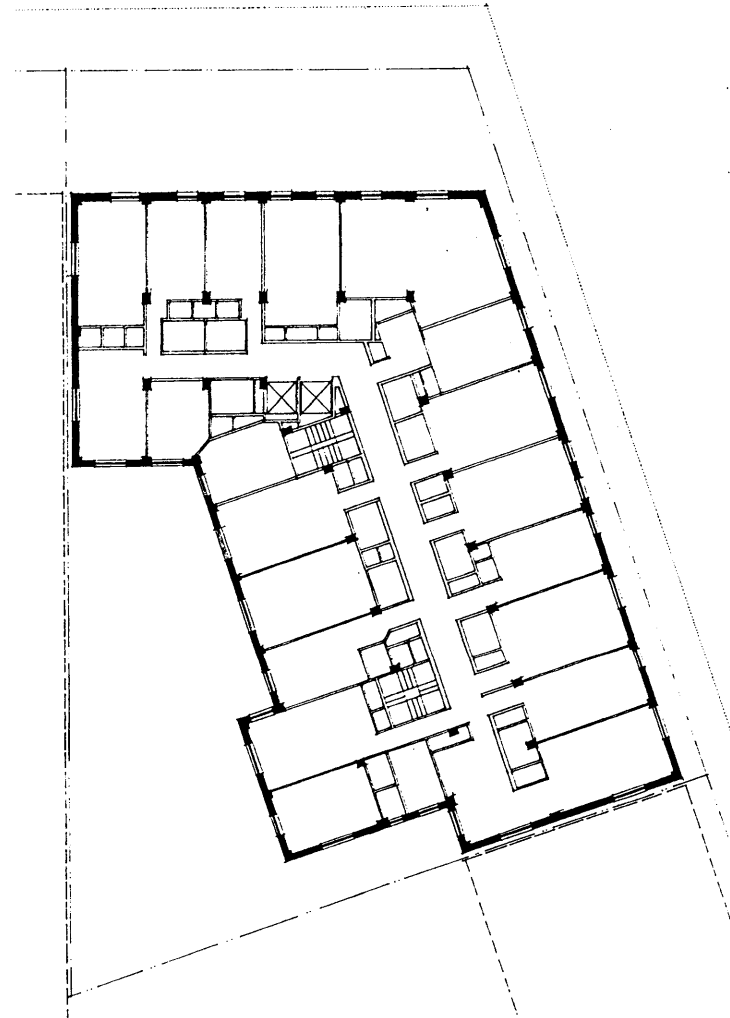


far left: Structural plan (1"=32').

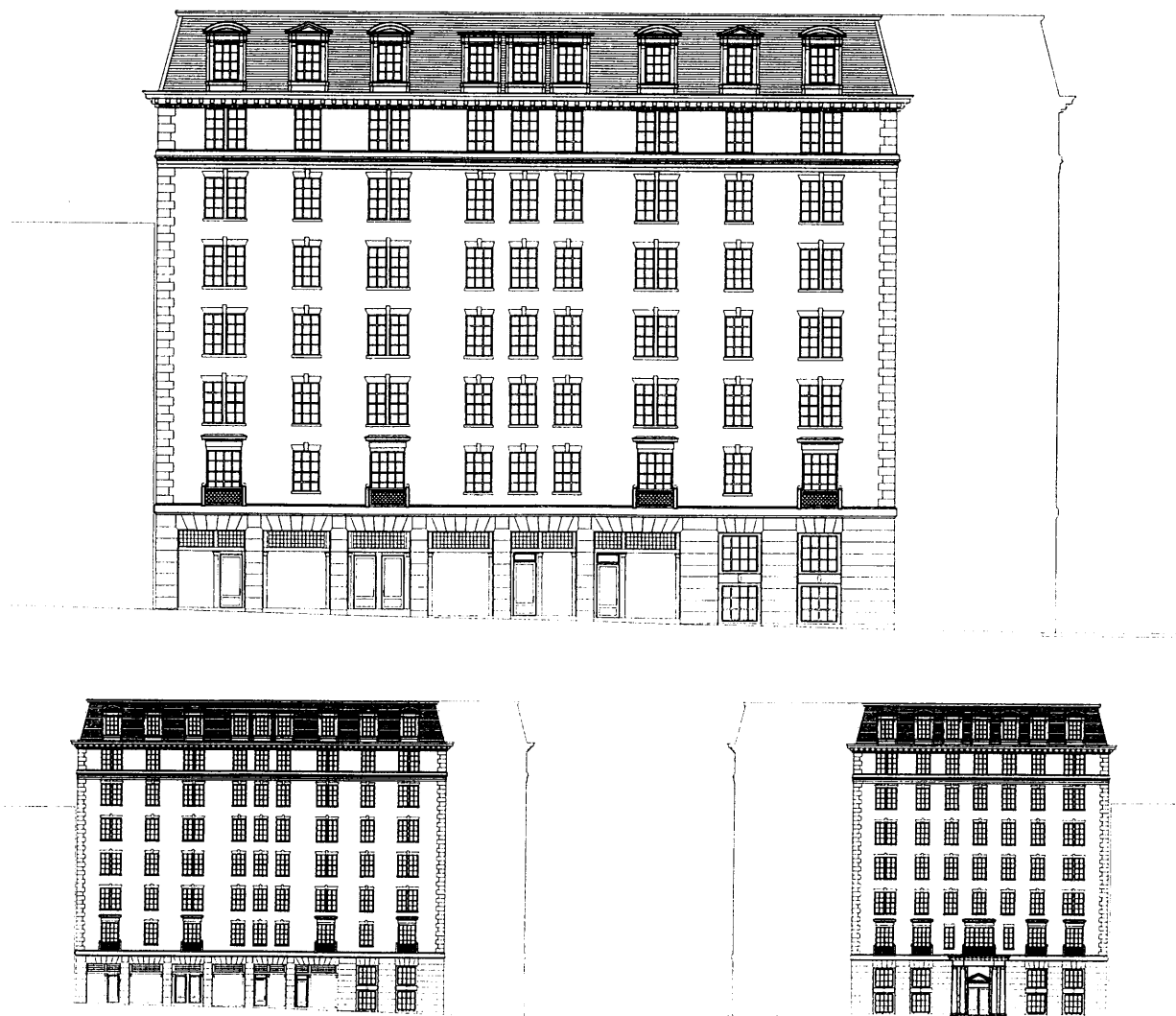
left: Existing ground floor (1"=32').

above: Existing section (1"=64').

right: Existing upper floor (1"=32').



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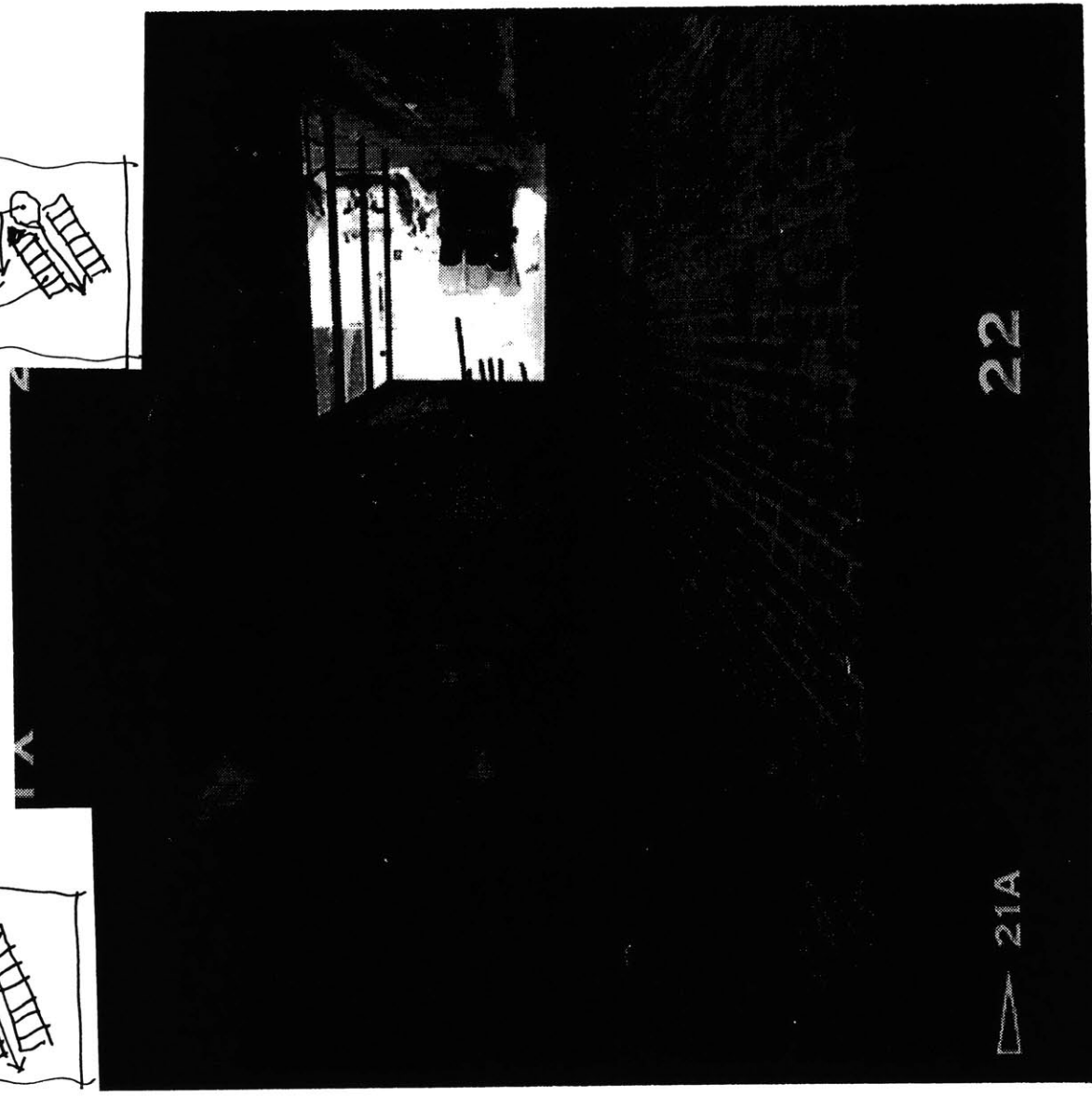
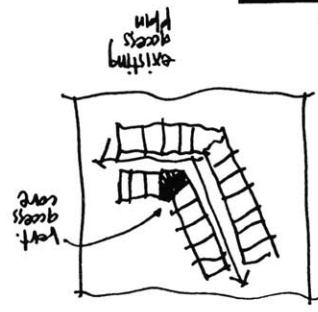
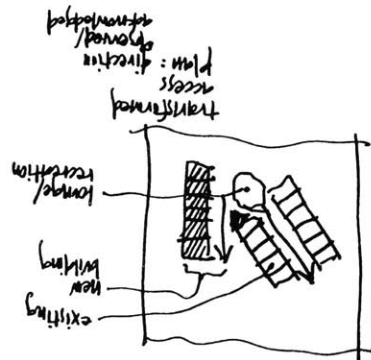
facing, top: Mass Ave elevation drawing (1"=25').

*facing, bottom: Comm Ave and Mass Ave elevations
(1'=50').*

above: Mass Ave elevation.

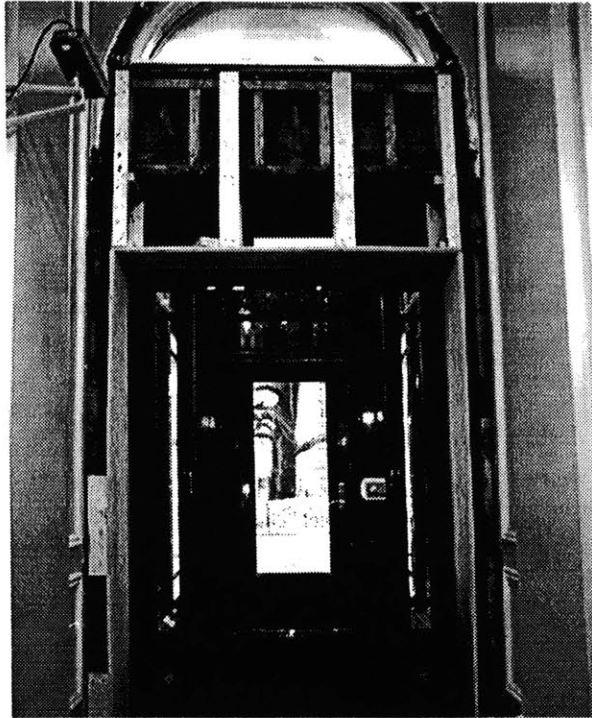
right: Comm Ave elevation.





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21A



left: View into loading area.

inset: Transformed upper plan diagram.

above: Existing entrance.

Program:

Using experiences detailed in the examples and the guidance of the committee, a program evolved to transform the existing building under the twin forces of external urban growth and internal organizational growth. Both components acted to produce the temporal transformation.

This program consists of the following elements:

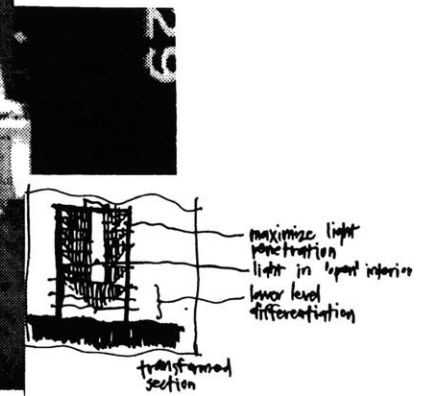
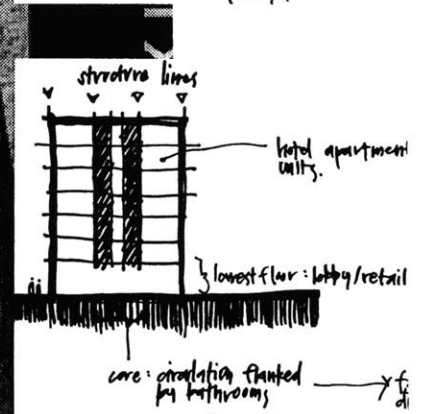
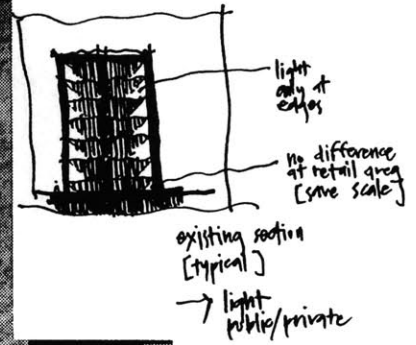
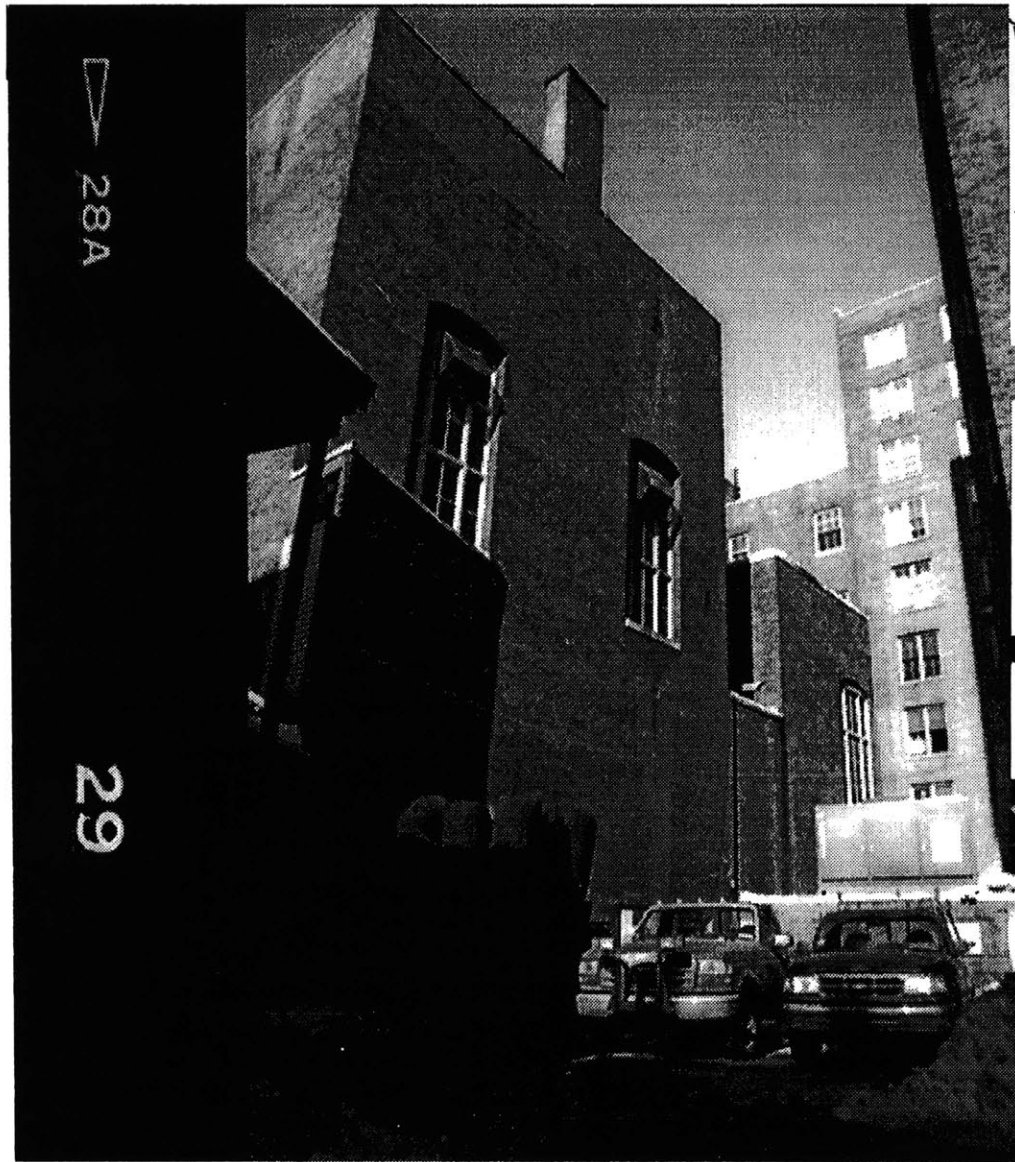
Guest residences:

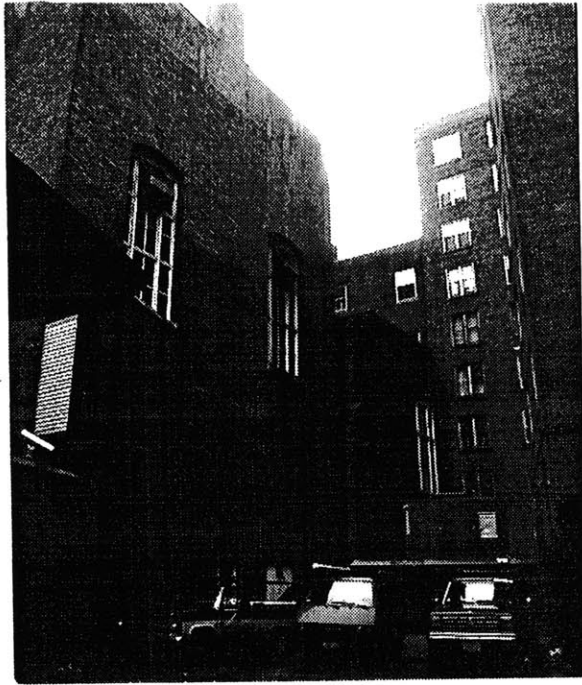
(35) 600 sf apartments

living
working
sleeping

(8) 800 sf apartments (on two levels)

living
working
dining
sleeping





left: Inside rear loading area.

inset, top: Existing section diagram (light).

inset, middle: Existing section diagram (cellular).

inset, bottom: Early section transformation (light in center, double-height units).

above: Inside loading area.

(1) 1500 sf apartment (on two levels)

living
working
kitchen
dining
[3] sleeping

Public use space:

presentation/performance: 800sf (cap. 75)

support booth: 50 sf

stage: 200 sf

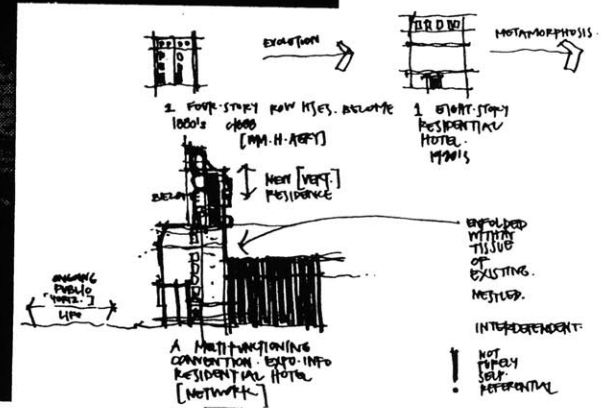
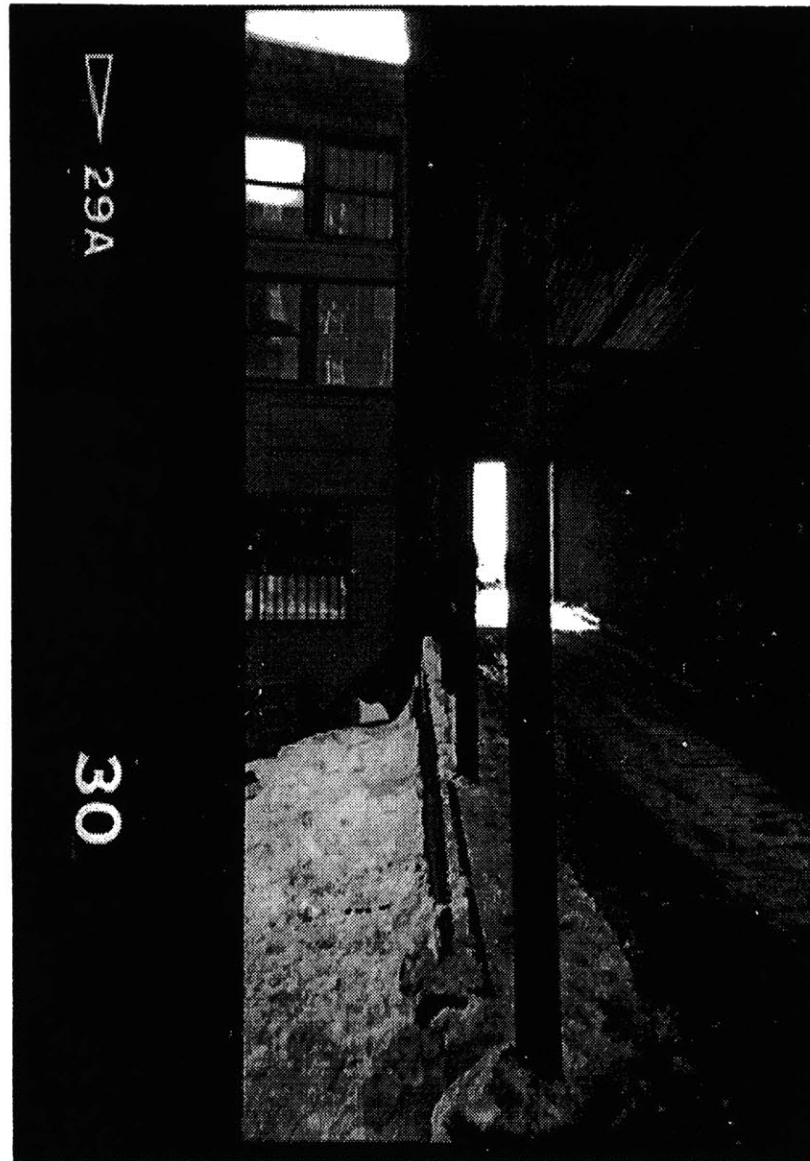
exhibit: 1000 sf

conference: 1000 sf

restaurant: 1500 sf

cafe expansion potential: +500 sf

The program in fact began purely as residences, a natural outgrowth of the building's present use as a hotel. The introduction of the presentation/exhibit space resulted from the perceived need to acknowledge the presence (internally) of this special group. By bringing in this public function, it then





left: looking out from loading area.

inset, top: Existing elevation diagram (night).

*inset, bottom: Early transformation elevation diagram
(documenting metamorphosis).*

above: South and west elevations.

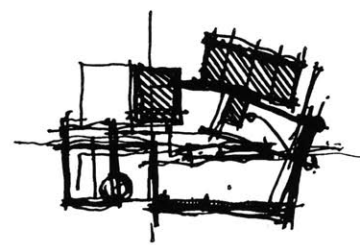
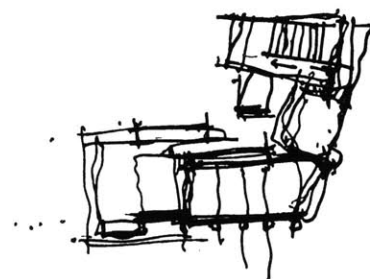
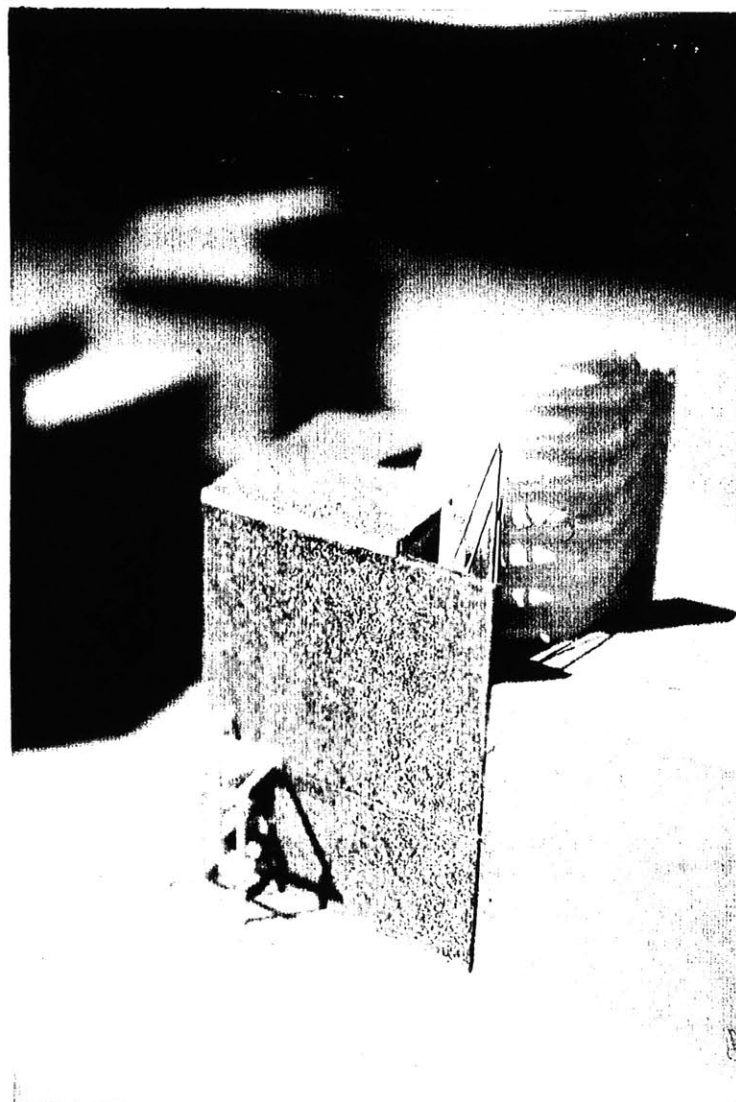
became useful to assess the role of the public in the area. Noting the fact that nearly all the buildings in the neighborhood had invited retail or other public facilities into the lower floors (the public section of Tower Records occupies three floors), it seemed reasonable to assume that a similar incorporation would occur naturally due to the social forces acting on the site.

Although the development process was not nearly this linear, decisions arose in approximately this fashion.

Presentation

This section documents design development through photographs and drawings, beginning with early study models exploring site organization and material. Interspersed are a series of sketches of site organization and experience. A few AUTOCAD 3D models photographs show building massing of the entire site. The last images show the last study model along with developed plans, sections, and elevations (once again sprinkled with a few sketches).

60

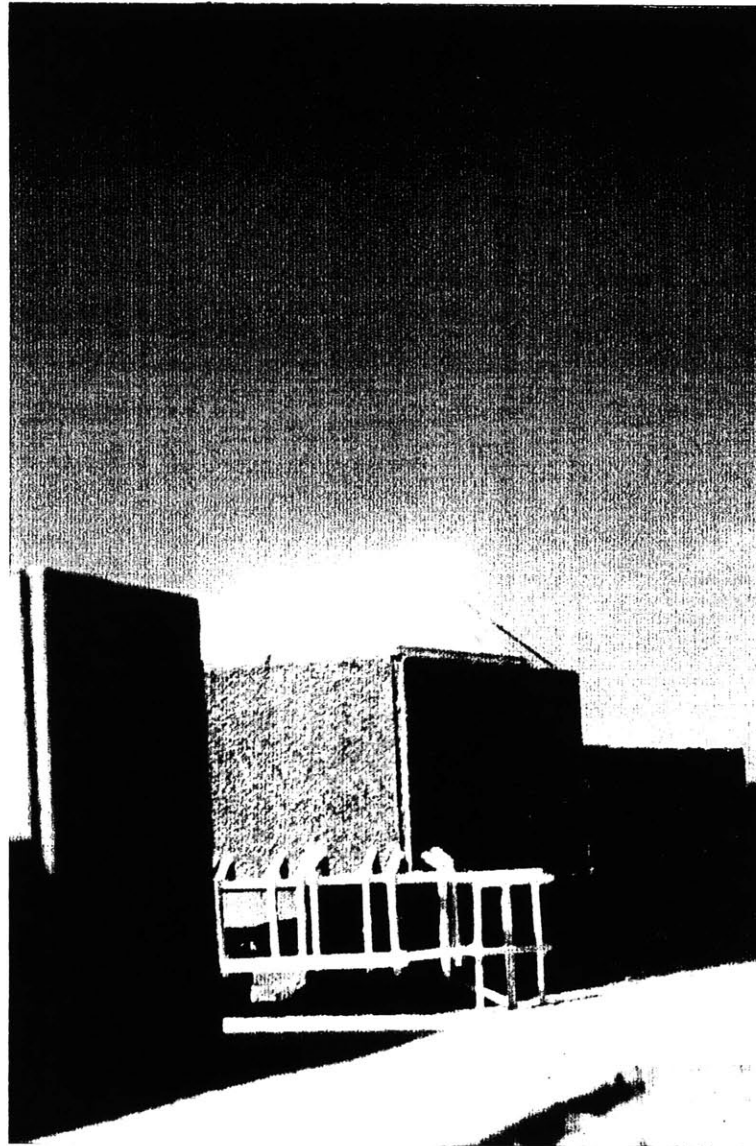


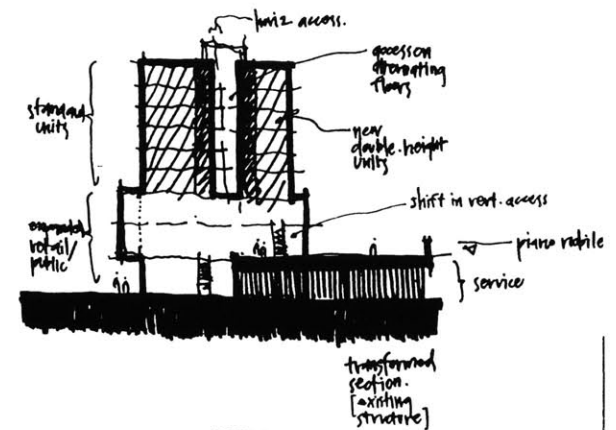
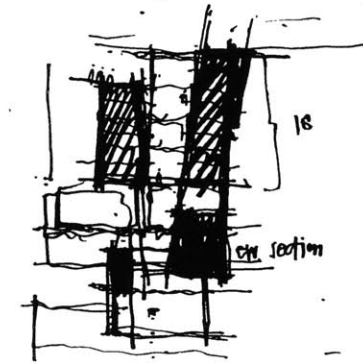
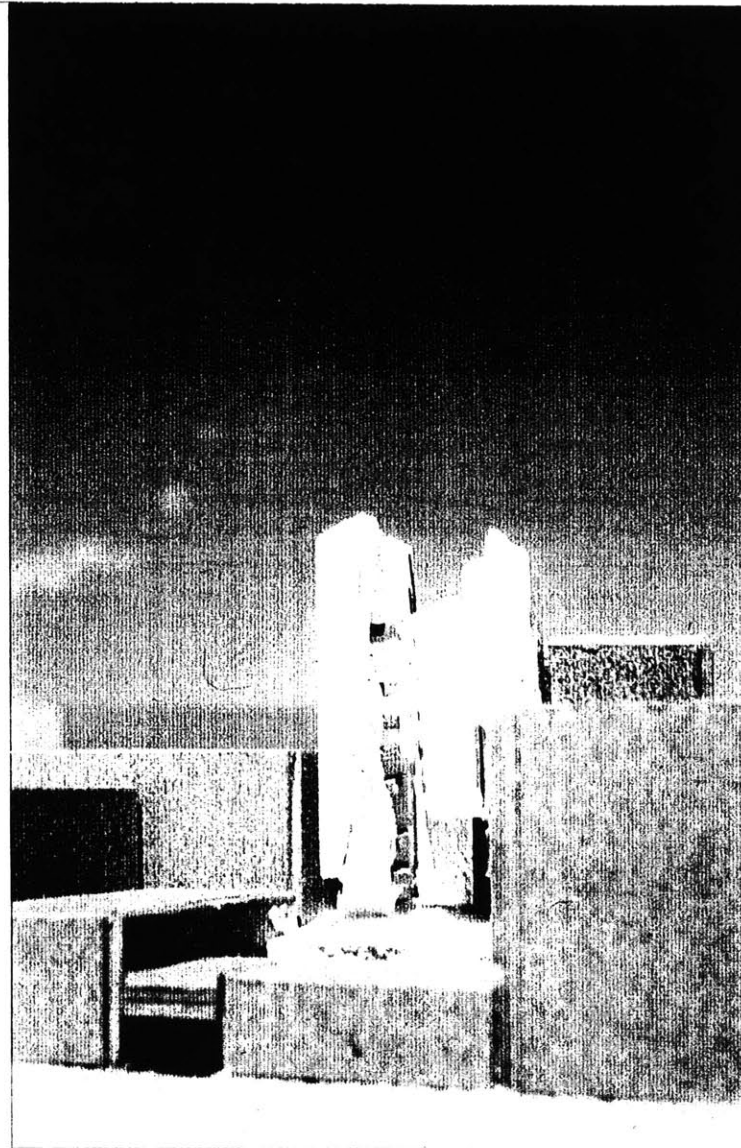
far left: Northwest view of early sketch model.

left, top: Early transformation plan diagram, lower level.

left, bottom: Early transformation plan diagram, upper level.

right: Northeast view of early sketch model.







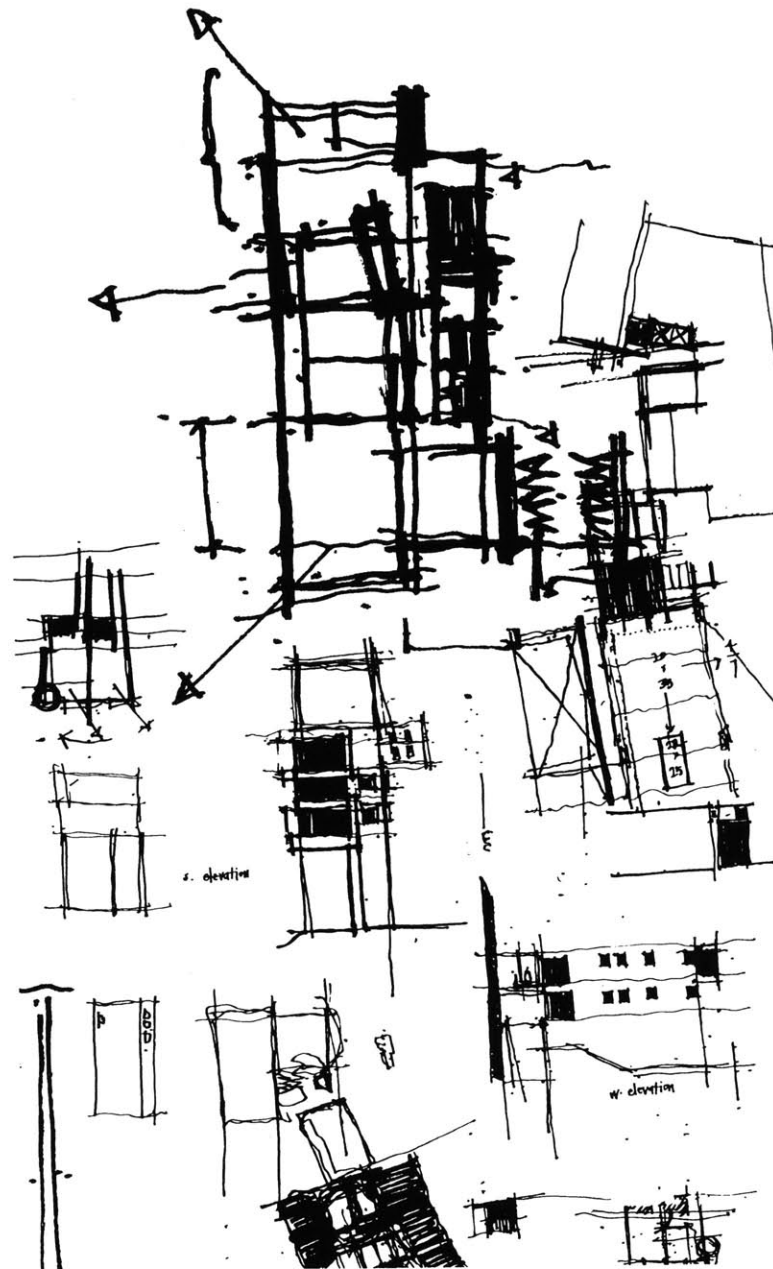
far left: Early sketch model, south view.

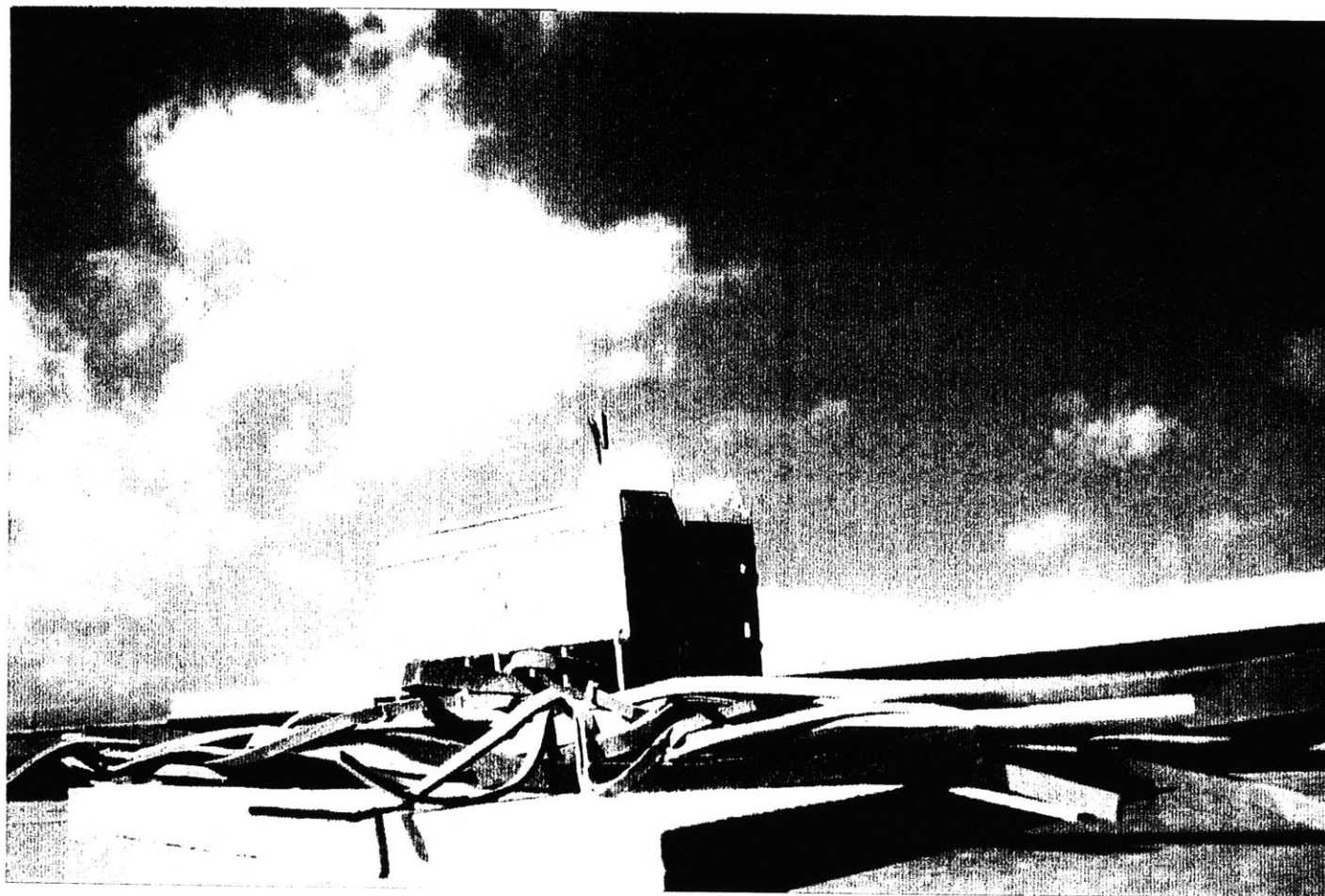
left, top: East-west section transformation sketch.

left, bottom: East-west section diagram.

above: Top view of early sketch model.

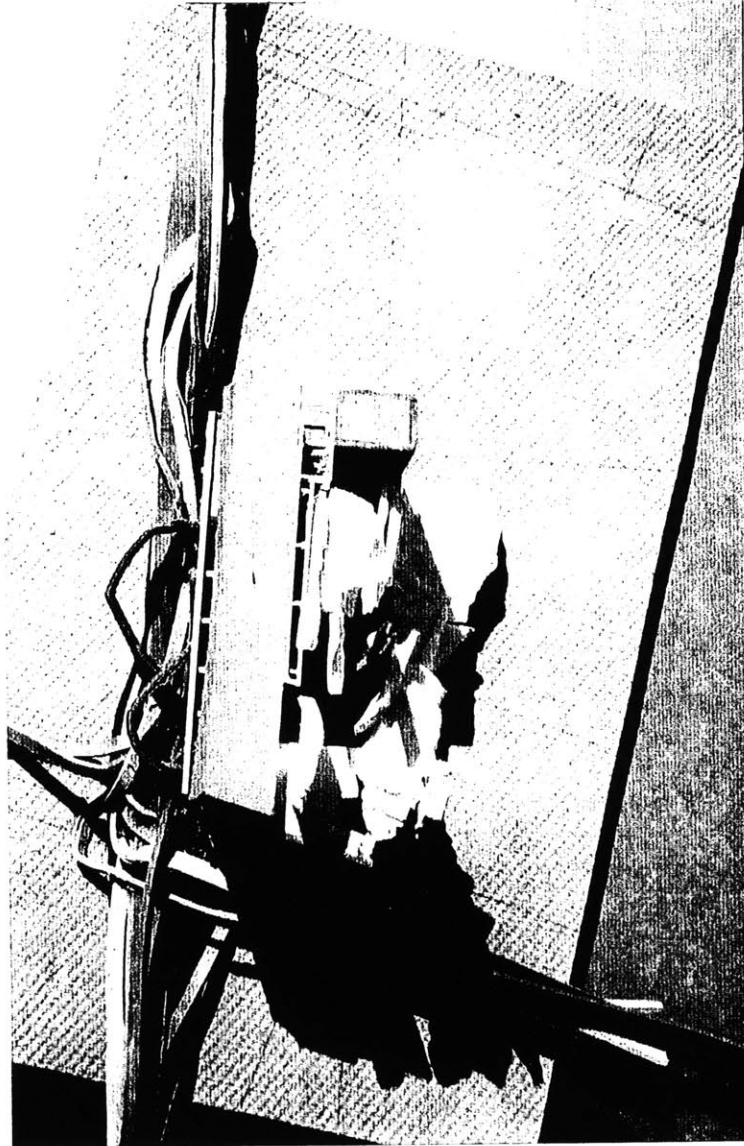
right: Plan and elevation sketches.



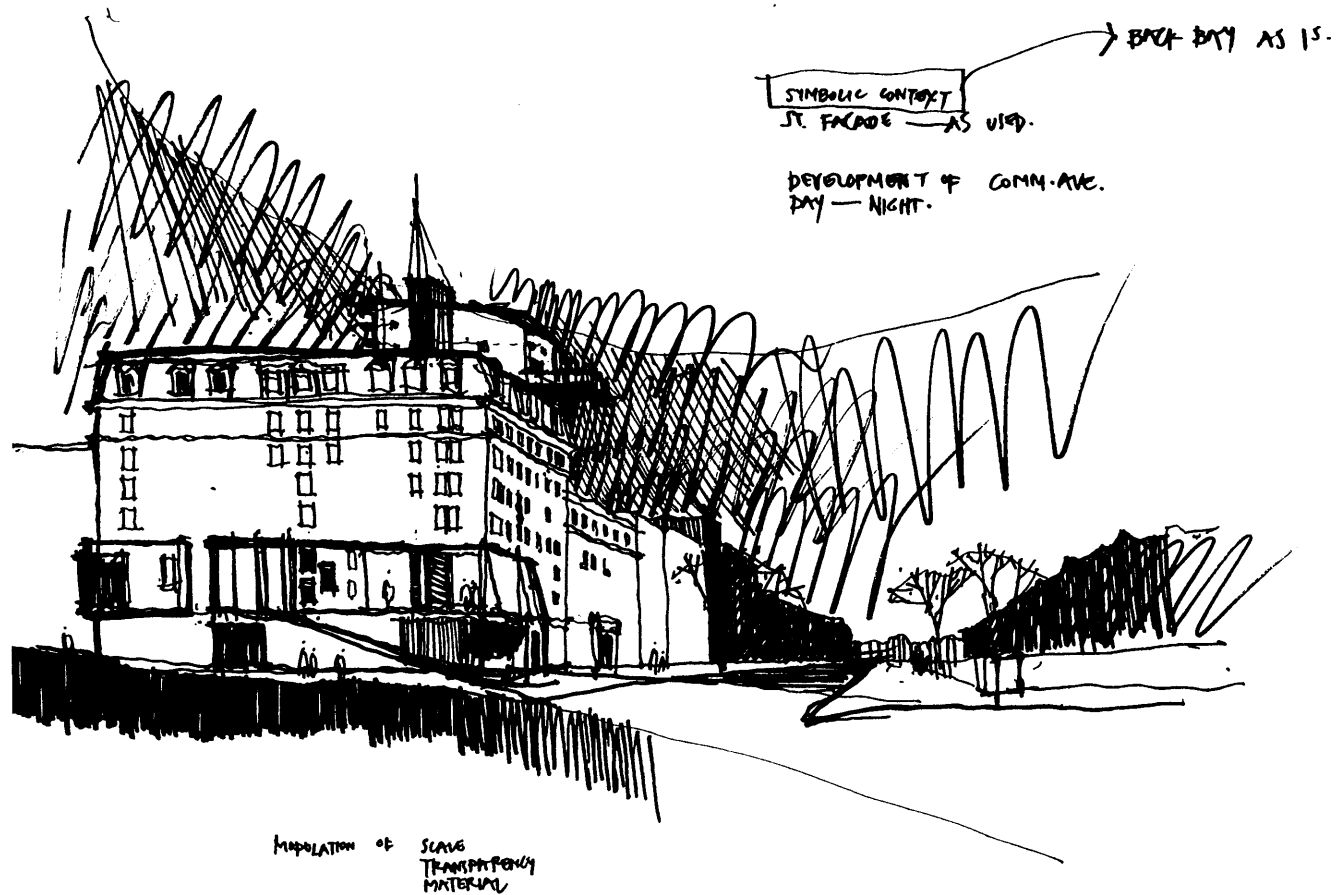


left: Early sketch model (exploring light, internal and external organization, public access).

right: Top view of same sketch model.



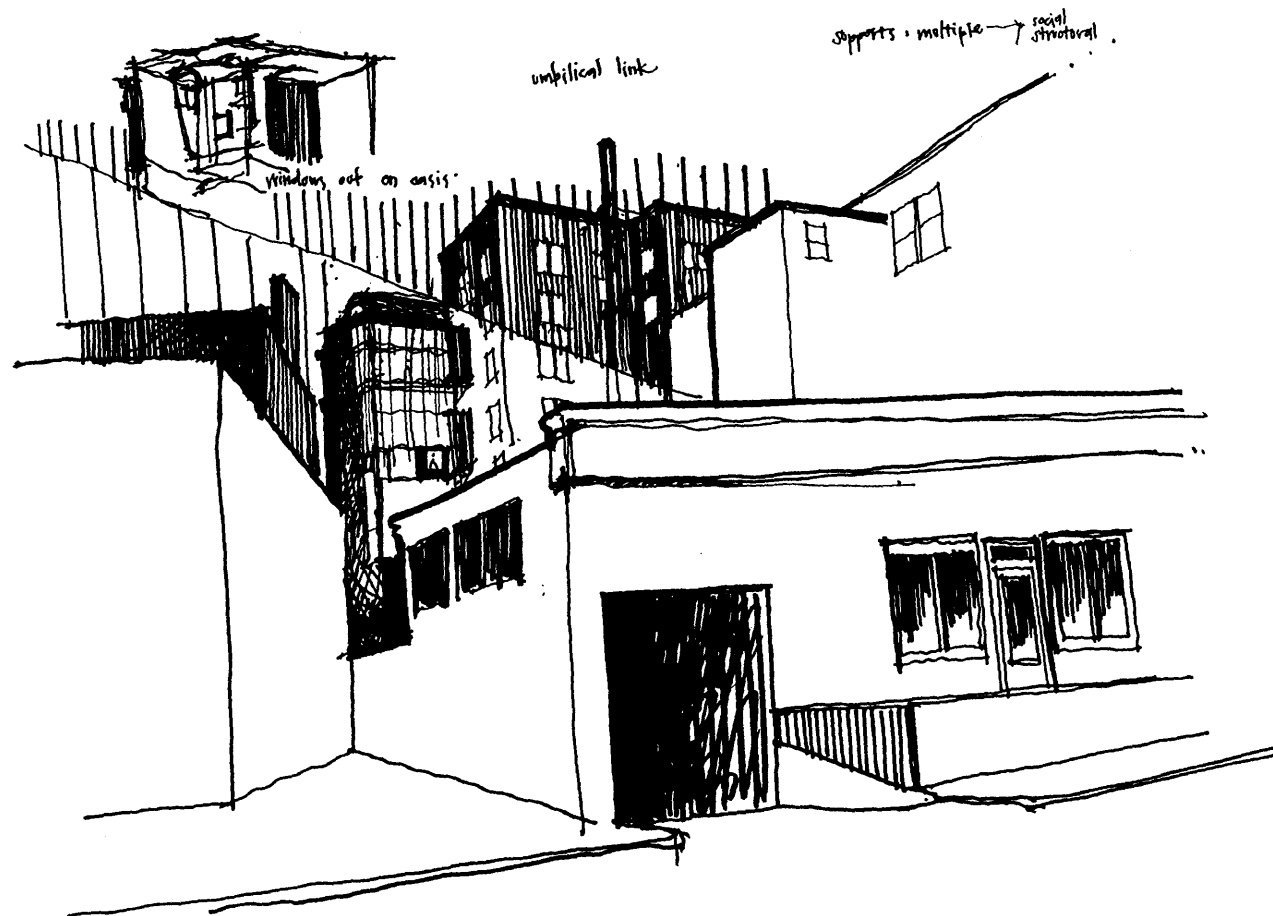
66



left: Early sketch perspective (northeast view).

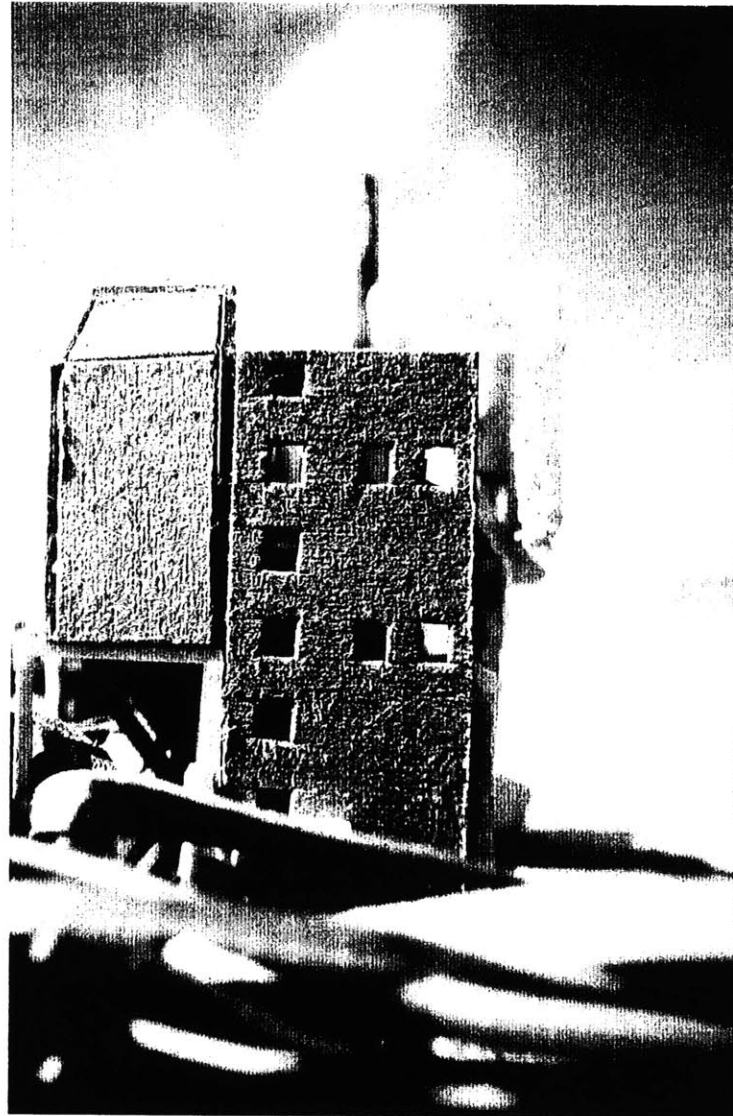
right: Closeup of top view (early sketch model).

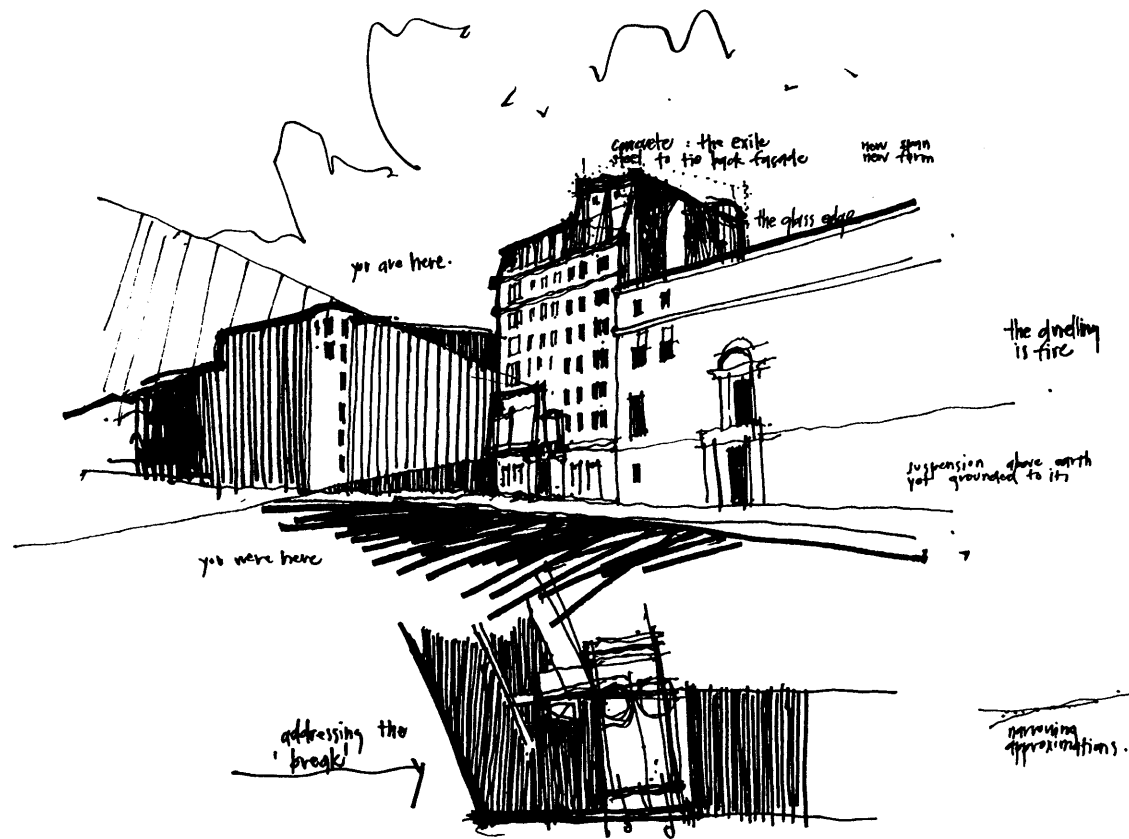


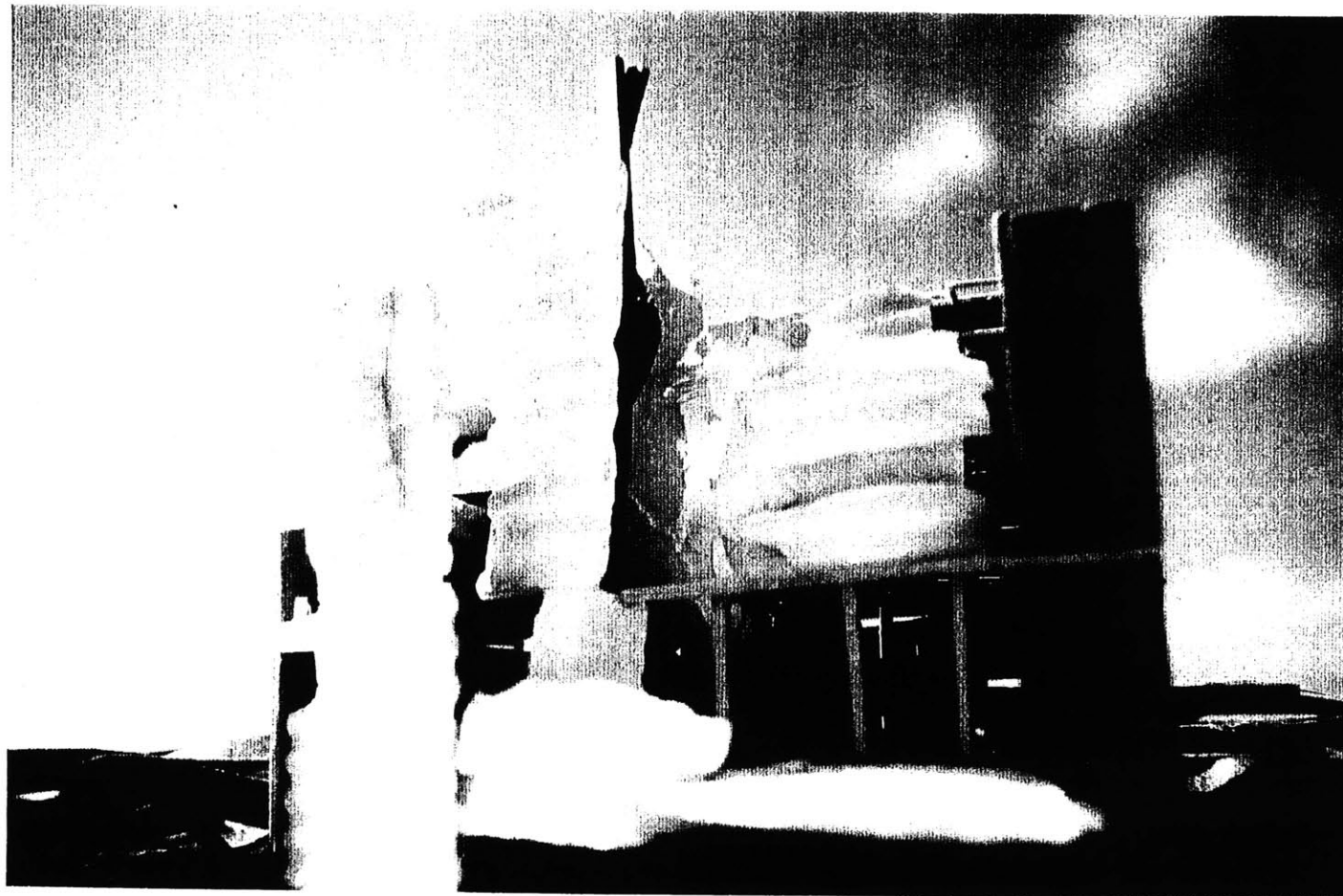


left: Early sketch perspective (southwest view).

right: North elevation of sketch model.



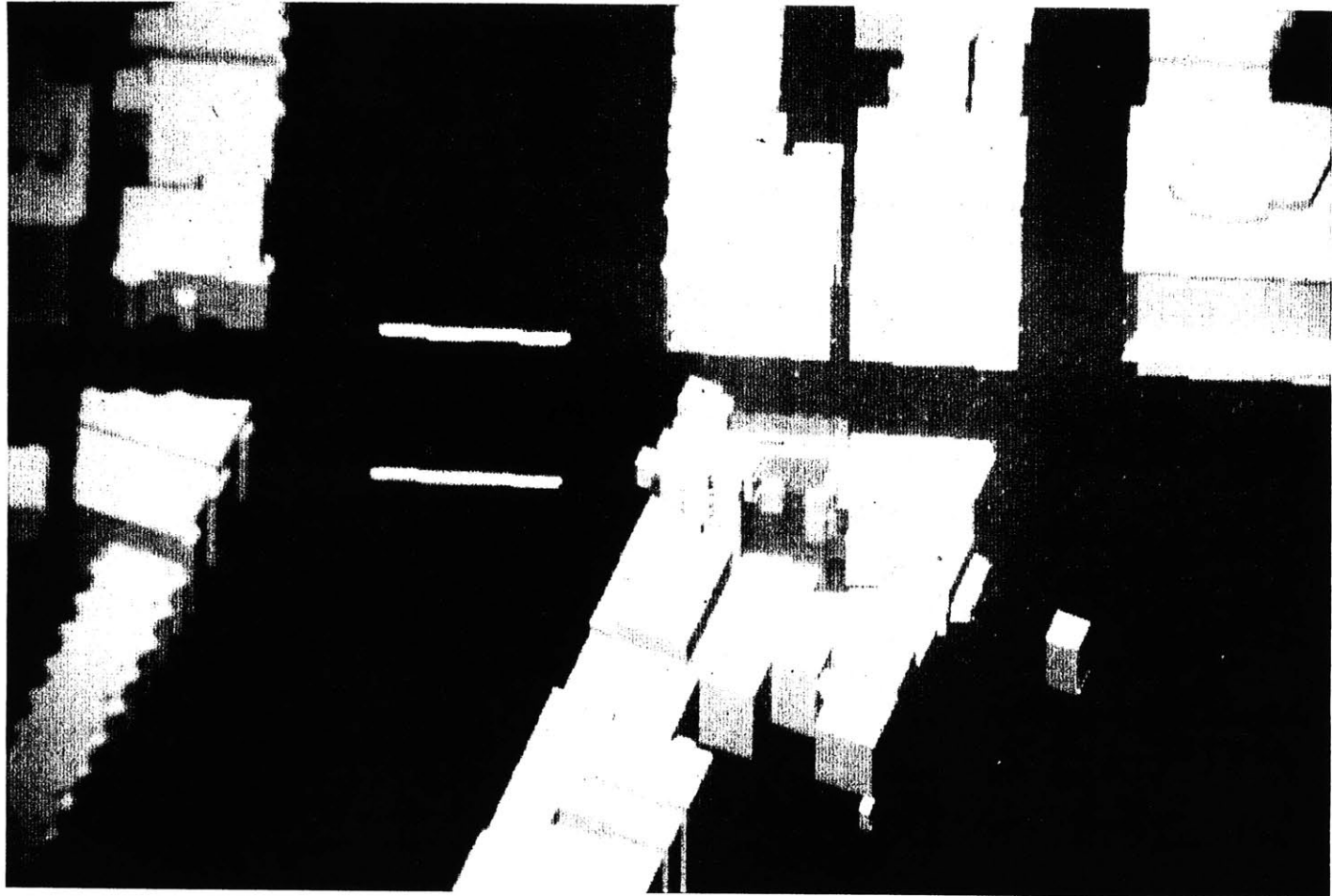


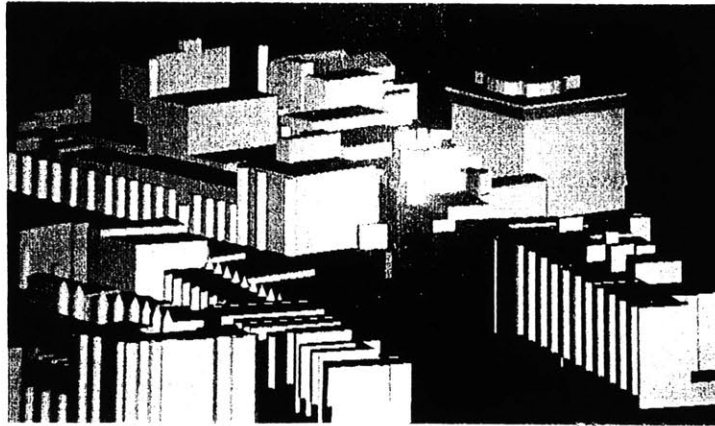


71

left: Early sketch of plan and northwest view.

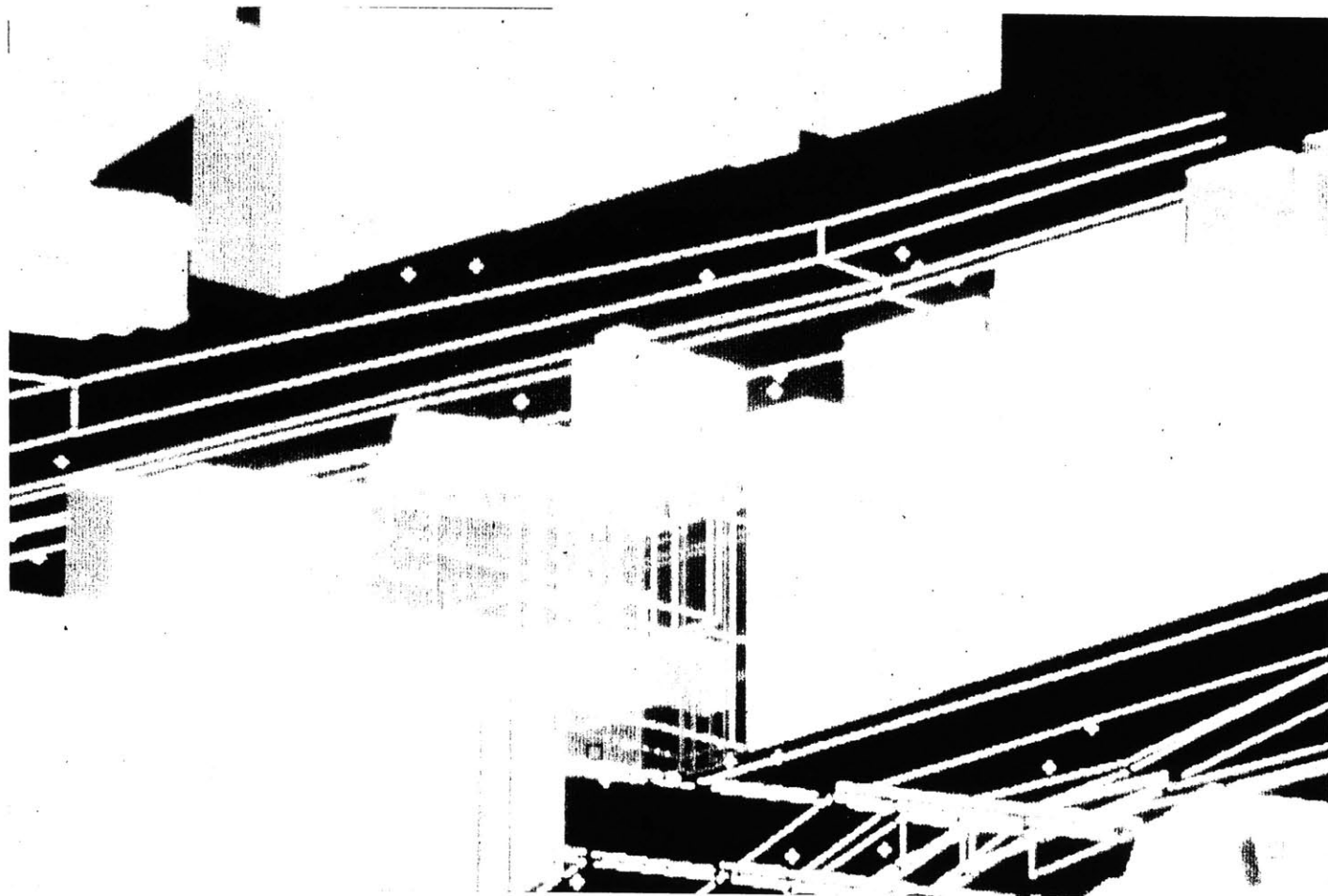
above: Southwest view of sketch model.

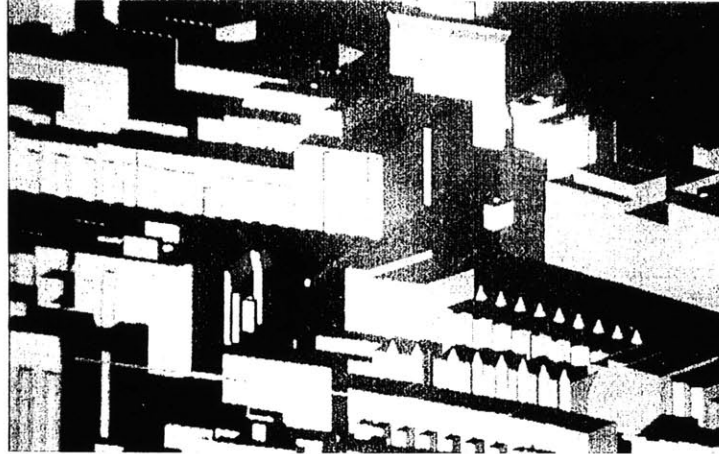




left: AUTOCAD model (southwest view into rear courtyard).

right: AUTOCAD model of site (northwest view).

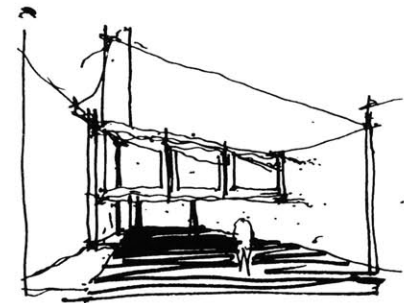
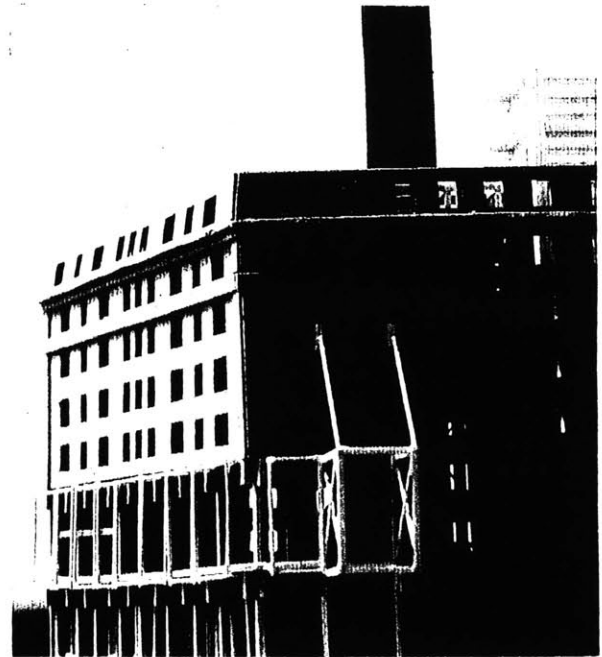




left: AUTOCAD model (northeast view).

right: AUTOCAD model (northwest view).

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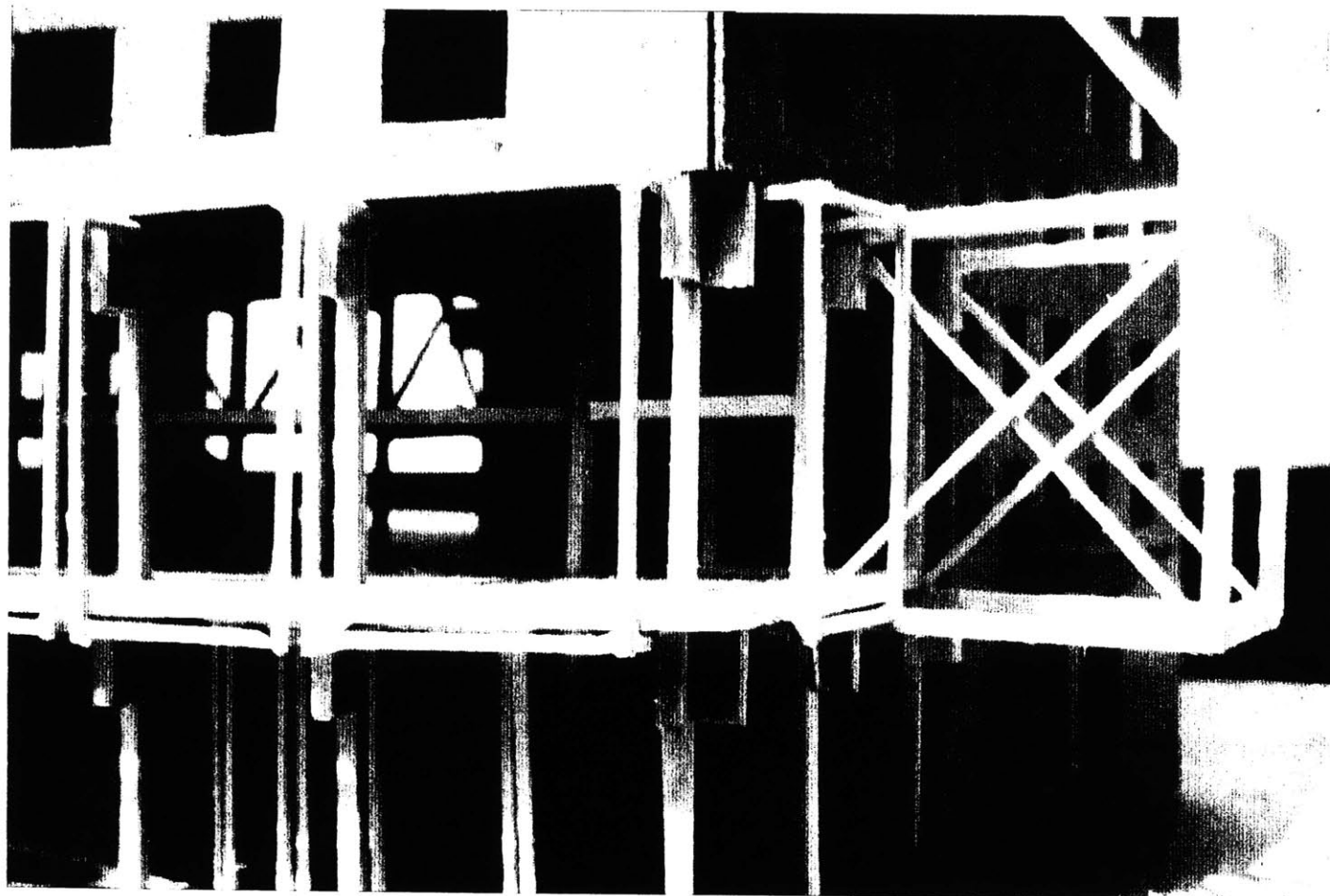


far left: Entry view.

left: Northeast view.

inset: Gallery/presentation perspective.

above: Northeast perspective.





left: View of entrance to gallery/presentation area.

above: Entry perspective.

right: Southeast view of entry.

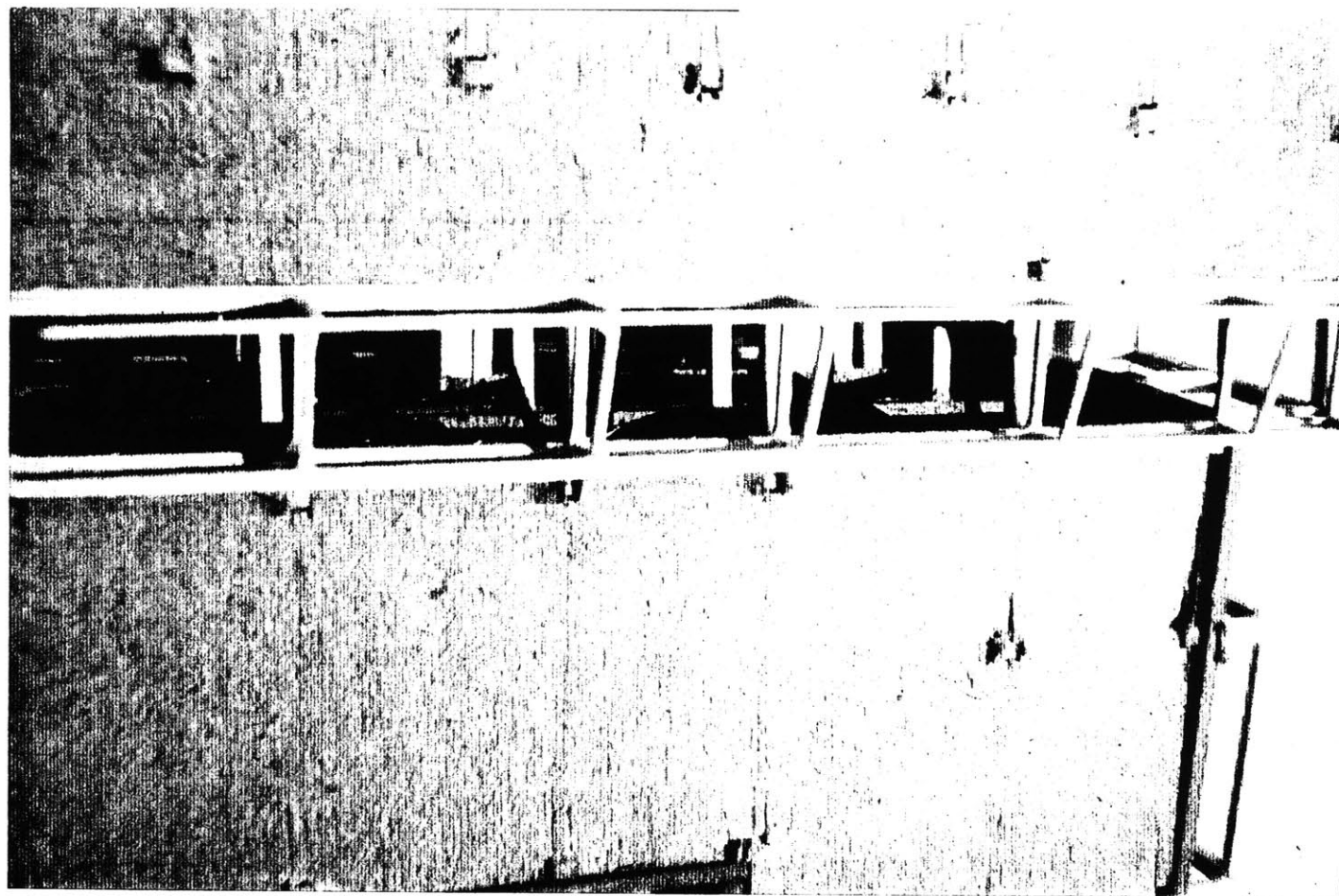




*left: View from south showing double-height units
and circulation zone.*

right: South elevation.





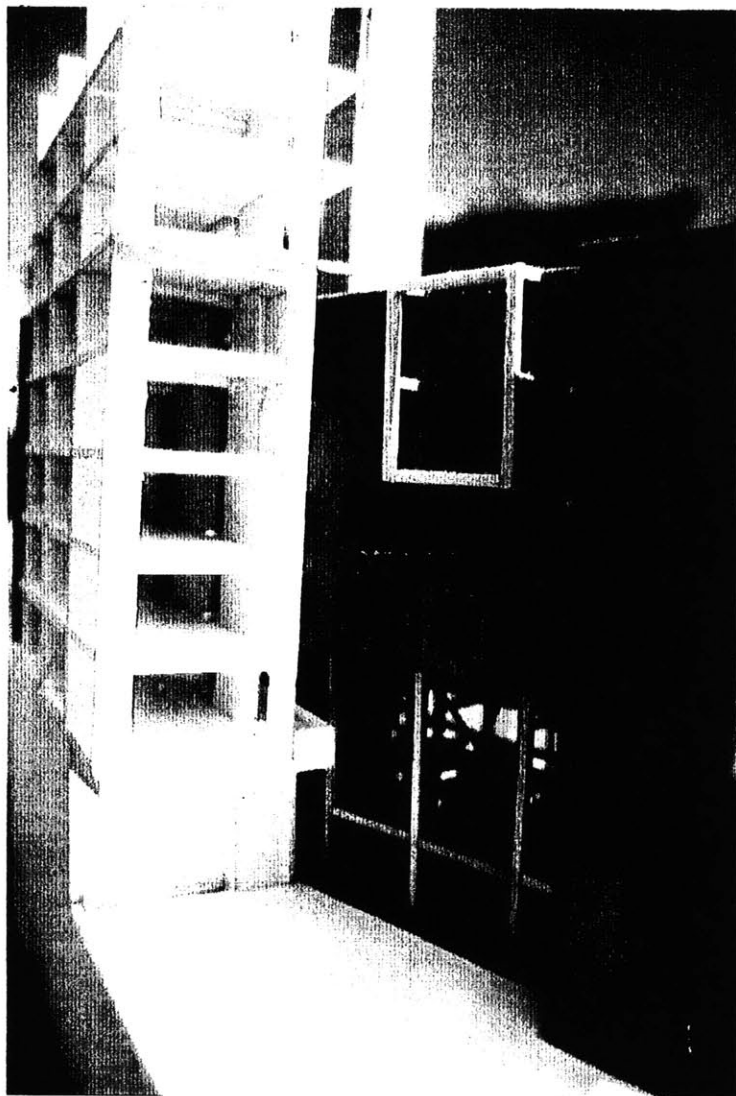


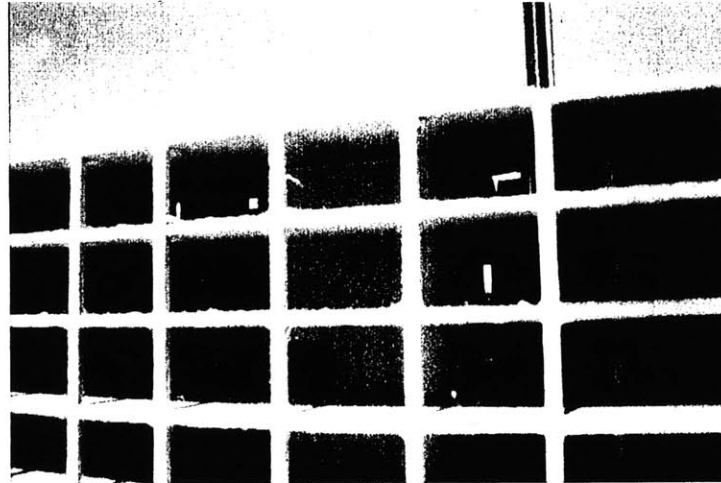
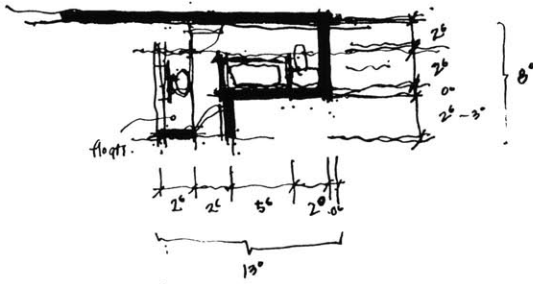
left: View of circulation space.

above: View inside circulation space.

right: Interior view of circulation space.





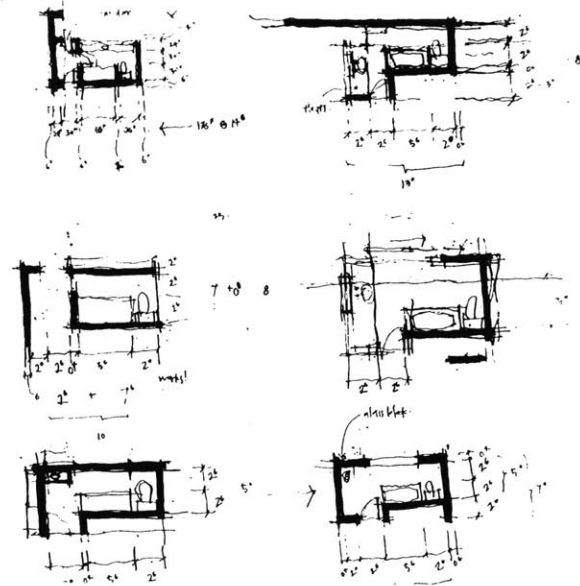


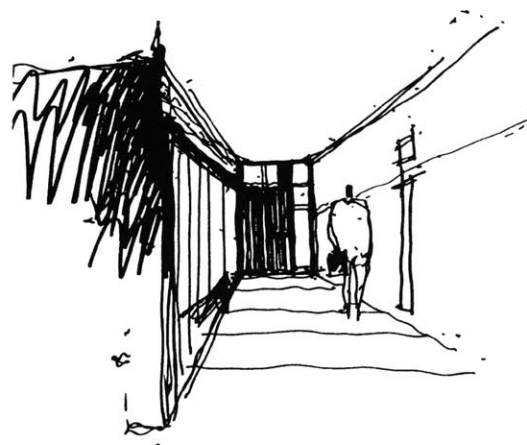
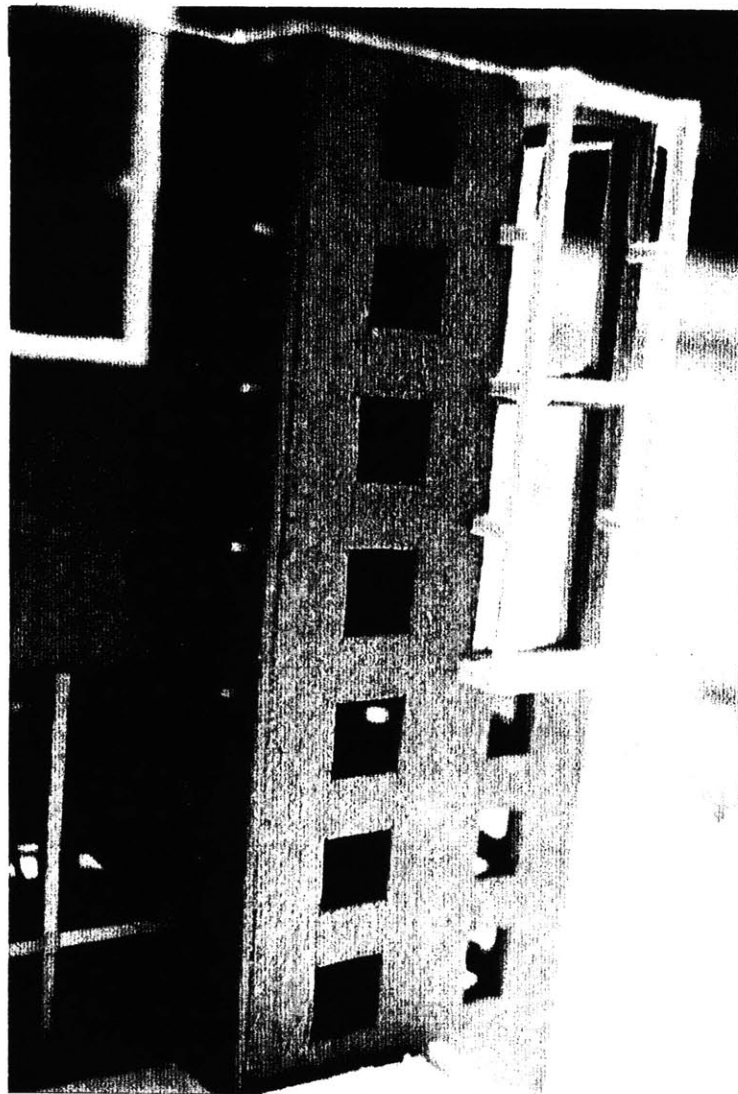
left: View of southern courtyard (uncovered).

above: Exploration of bathroom (sink area floating to define area inside and outside of bathroom).

right, top: View behind facade.

right, bottom: Exploration of bathroom, plans.







far left: View out of courtyard from the northeast.

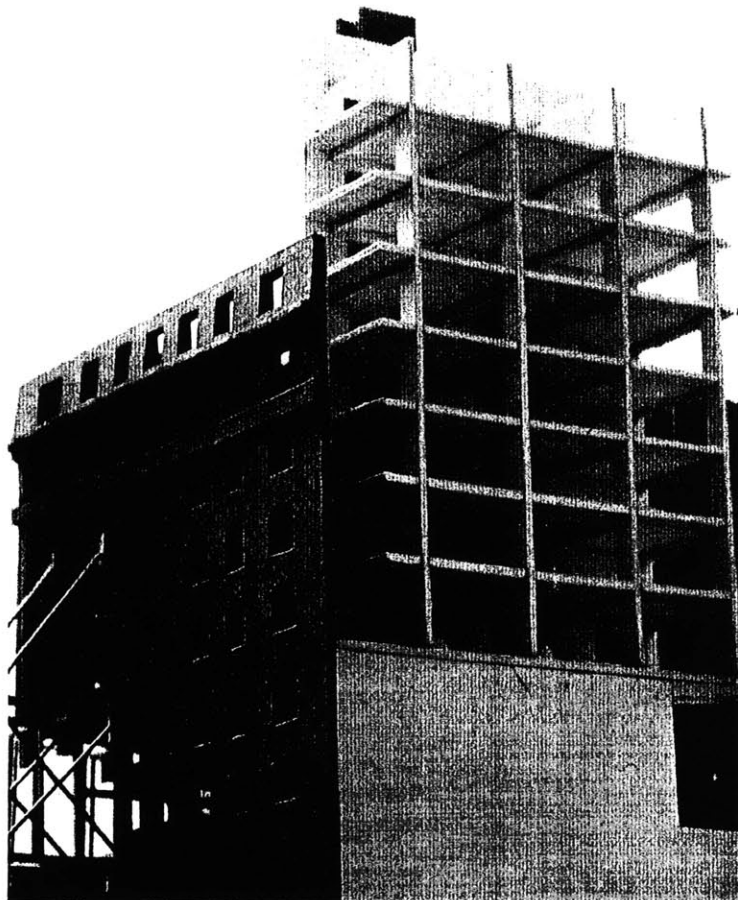
left: Perspective from entry to dwelling.

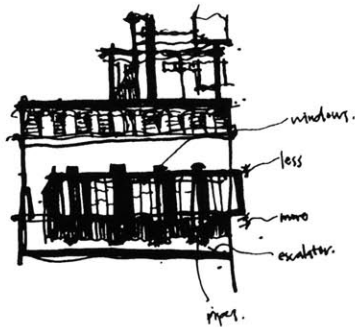
above: Perspective inside living area of dwelling.

right: View into double-height spaces.



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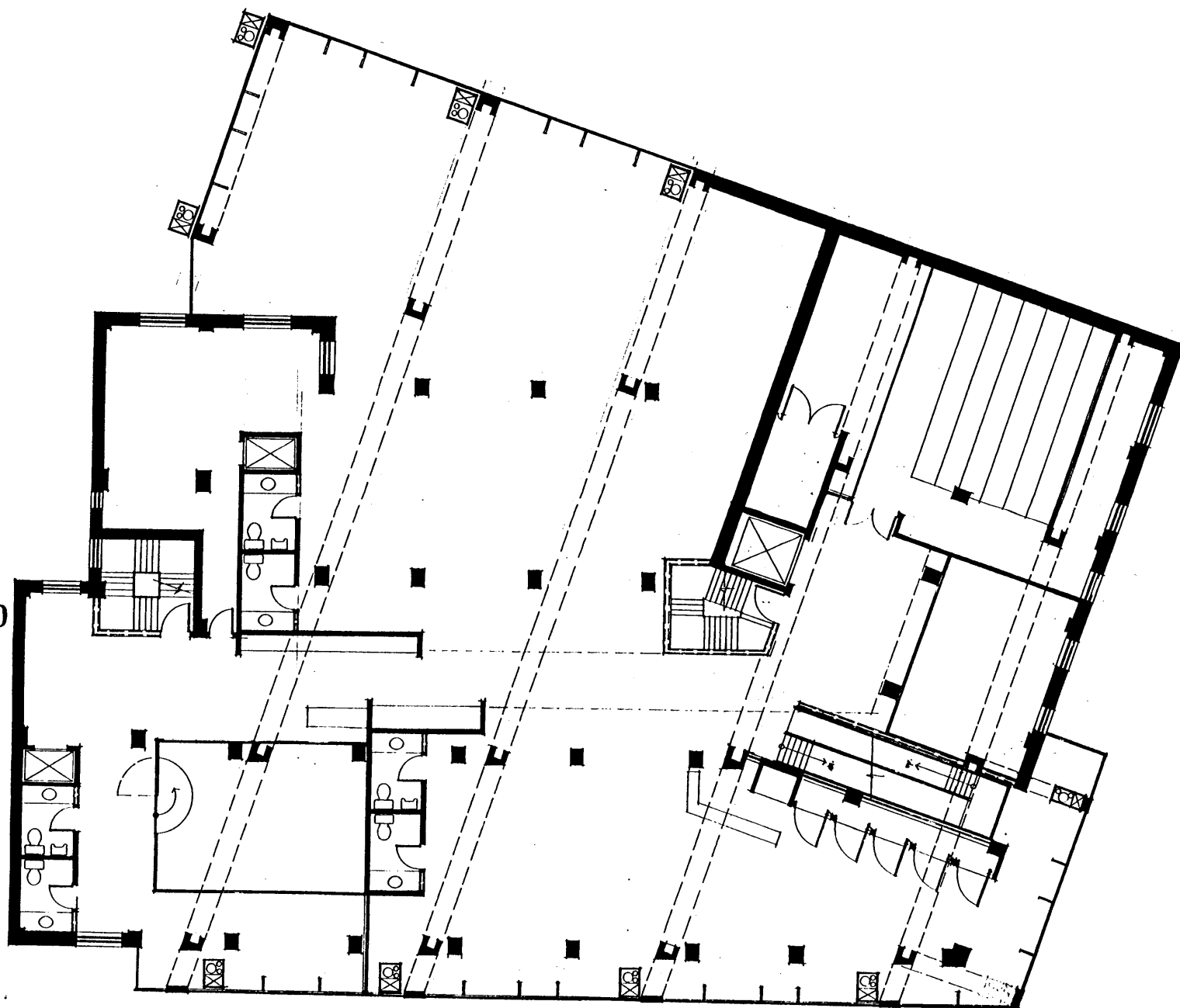
left: View inside replaced multi-story section of building.

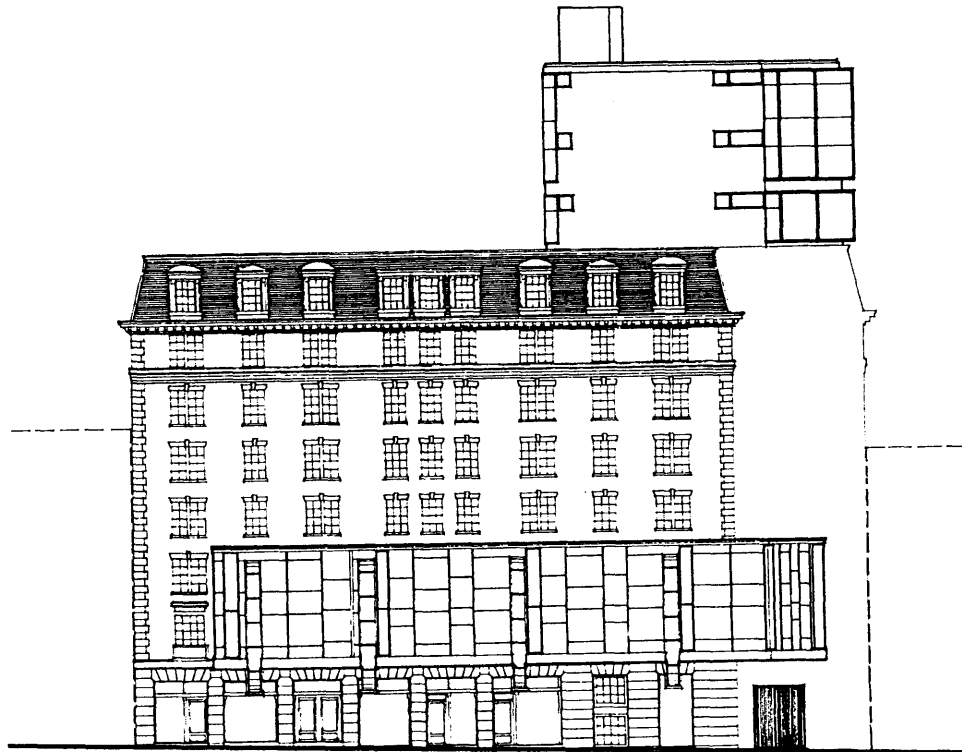
above: Elevation sketch.

right: View of separated replacement structure.



90



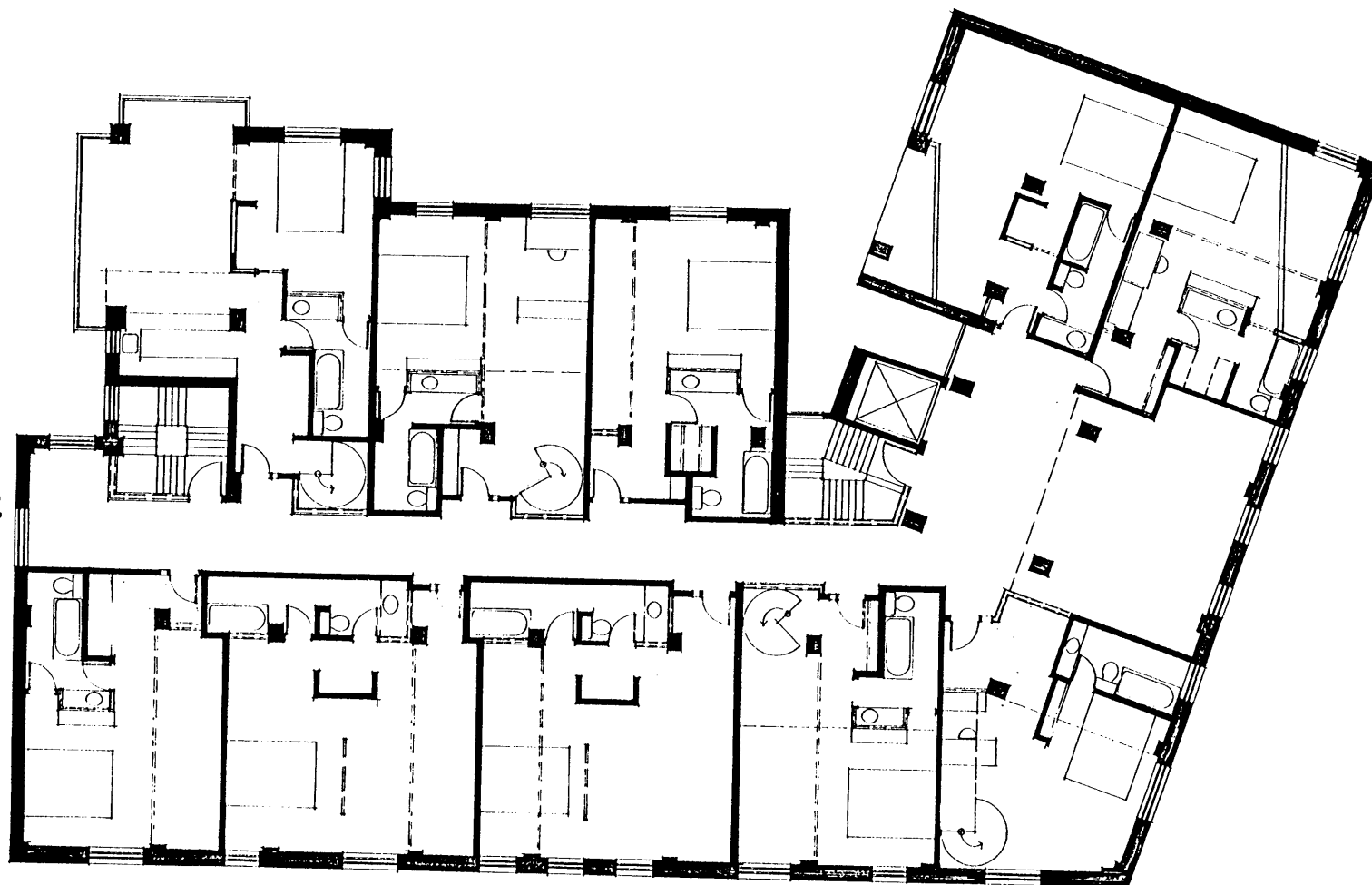


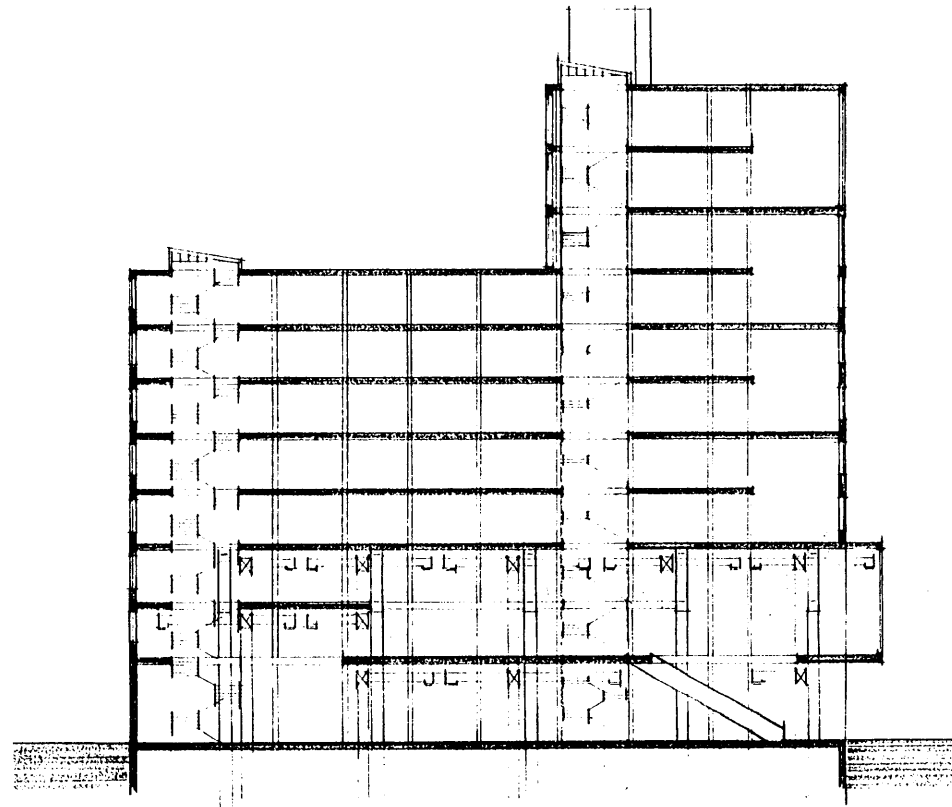
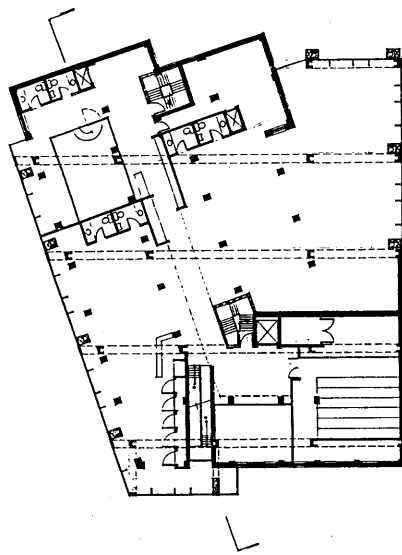
91

left: Lower level plan (final, 1"=16').

above: Mass Ave elevation (final, 1"=32').

92



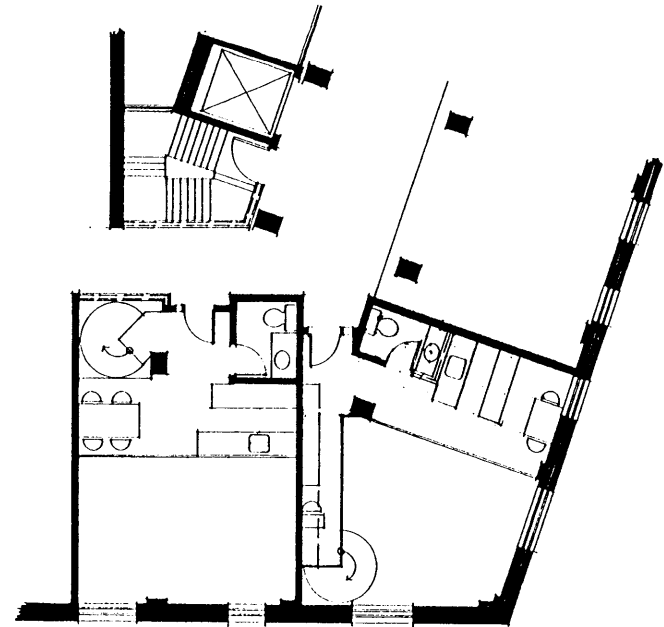
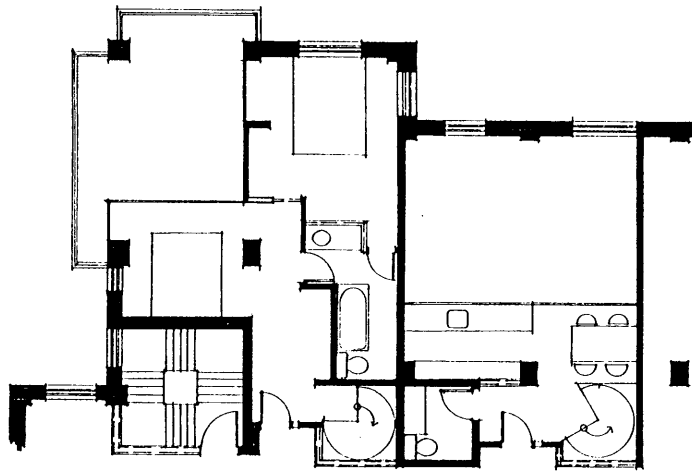


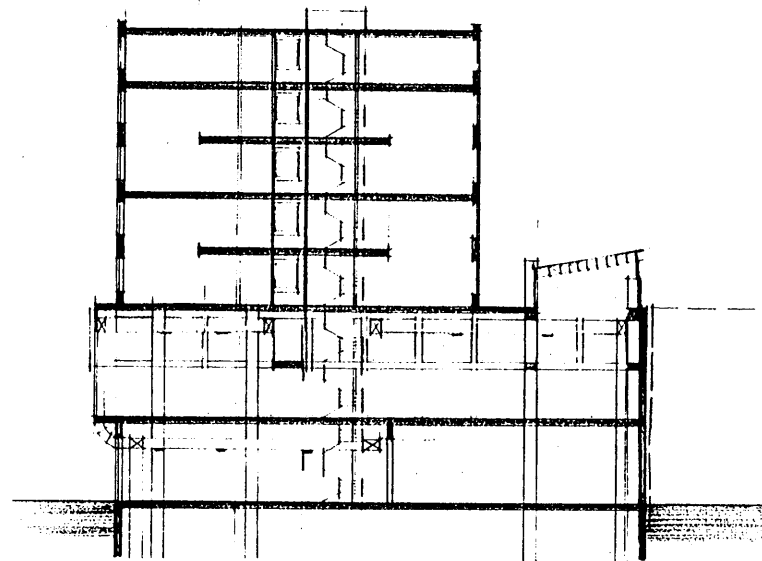
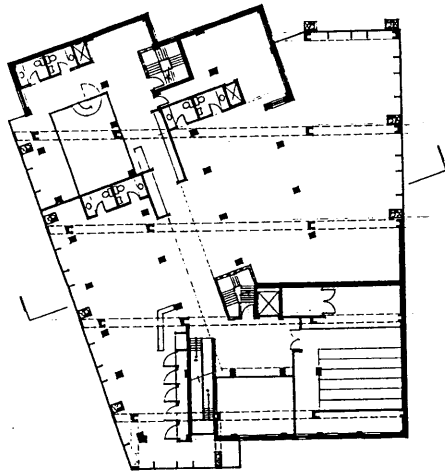
93

left: Upper level plan (final, 1"=16').

above: North-south section (final, 1"=32').

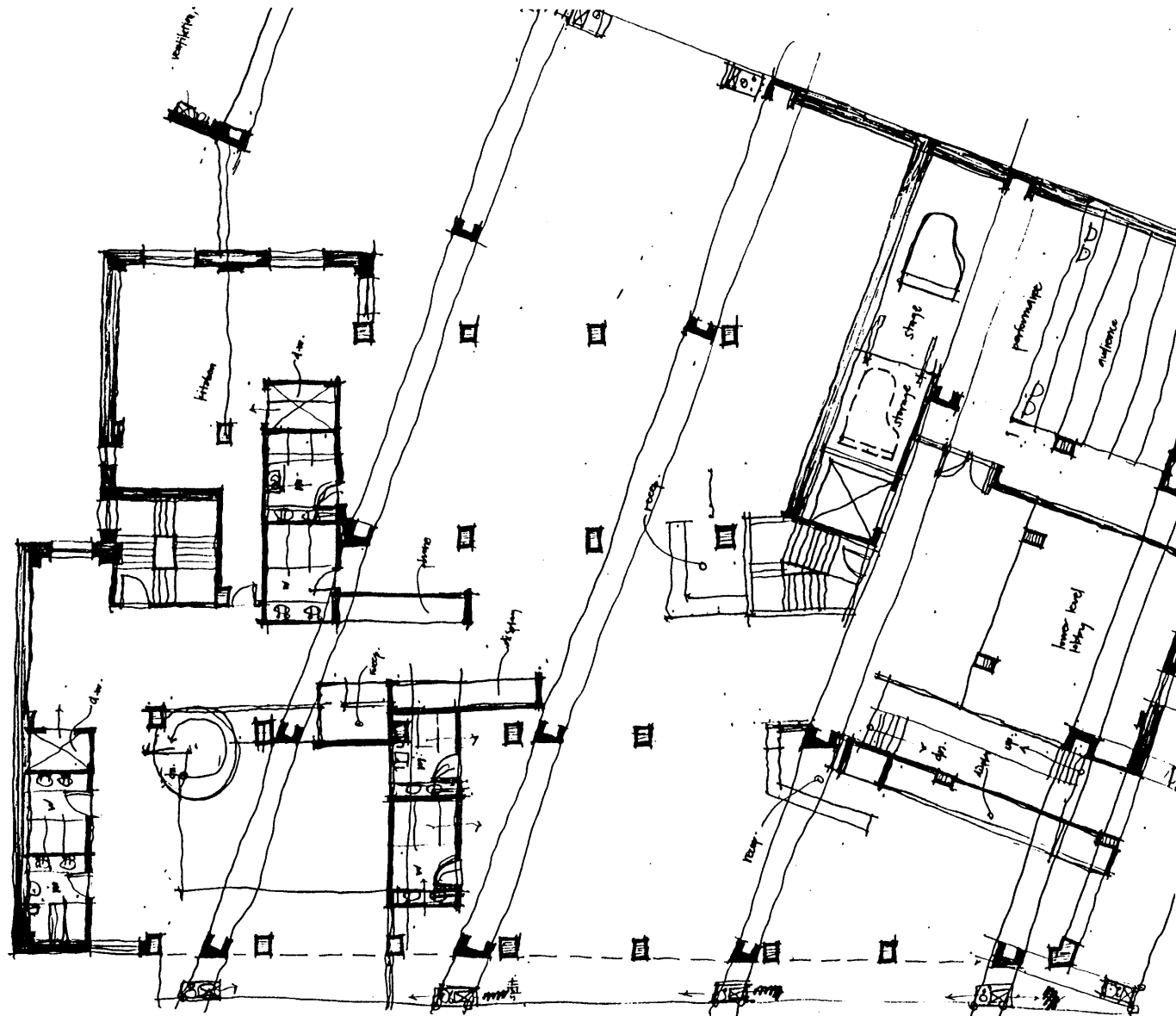
94

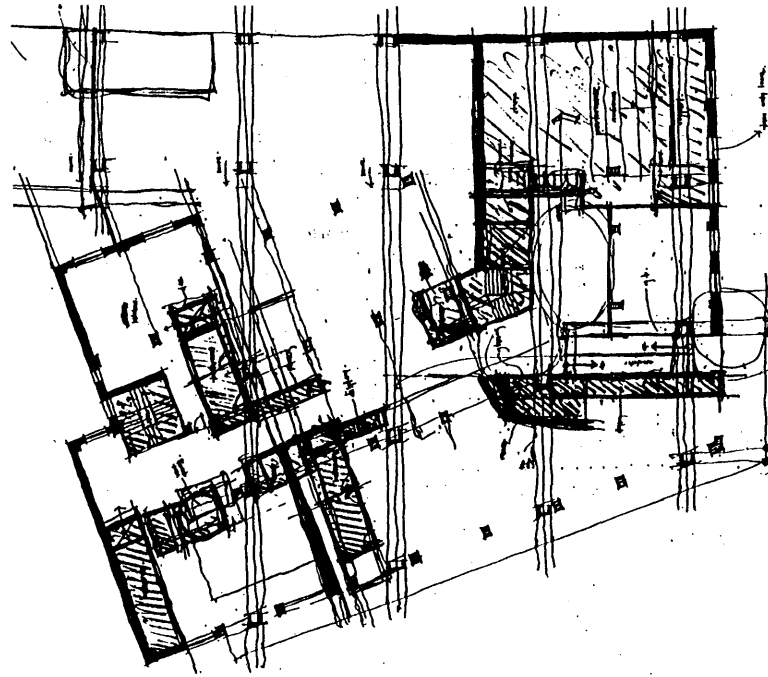




*left: Plan showing second floor of double height units
(final, 1"=16').*

above: East-west section (final, 1"=32').

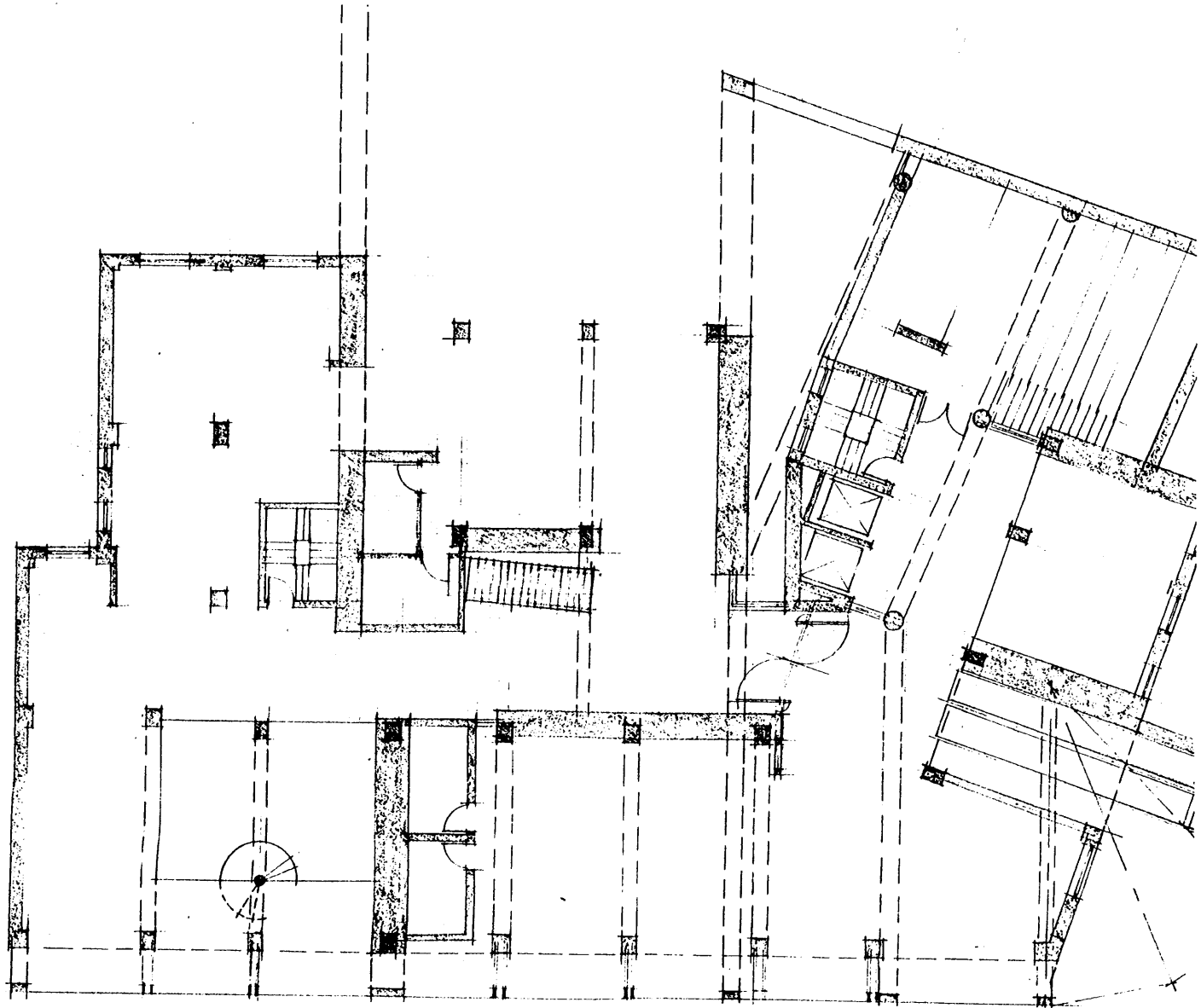


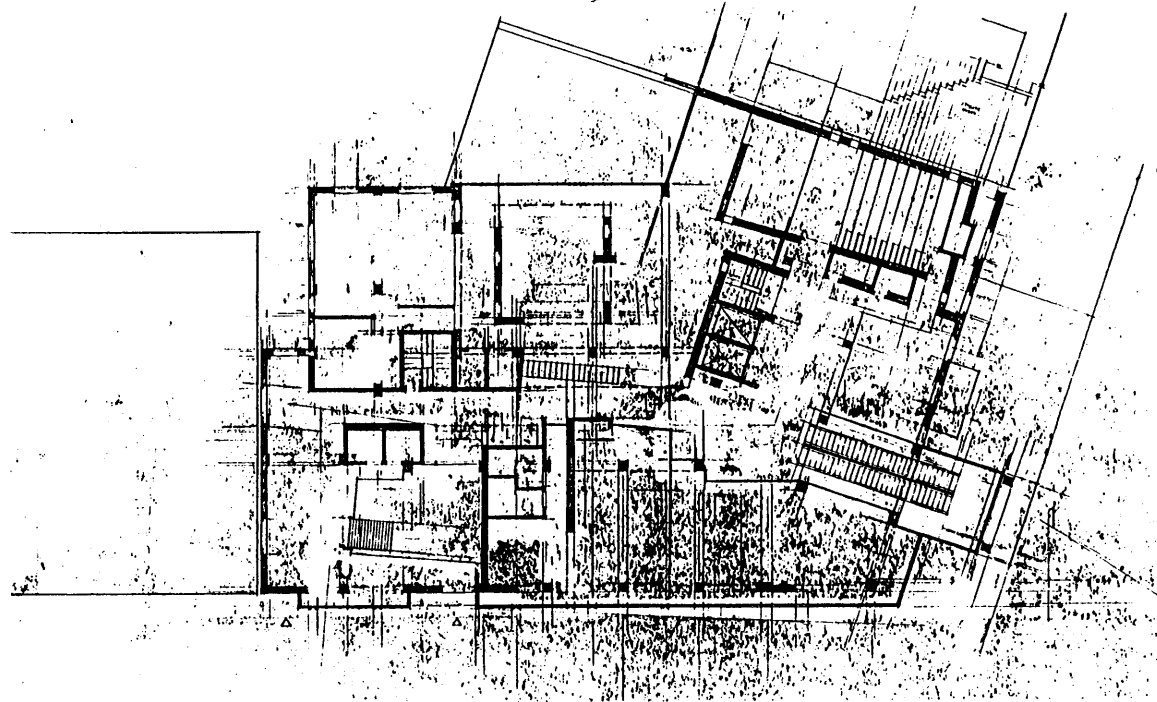


left: Lower level plan design sketch (1"=16'); marks decision to differentiate new structure, incorporation of utilities.

above: Plan diagram (1"=32'); shows basic operation of structural differentiation, definition of spaces through deployment of larger opaque forms; alternations of dark and light.

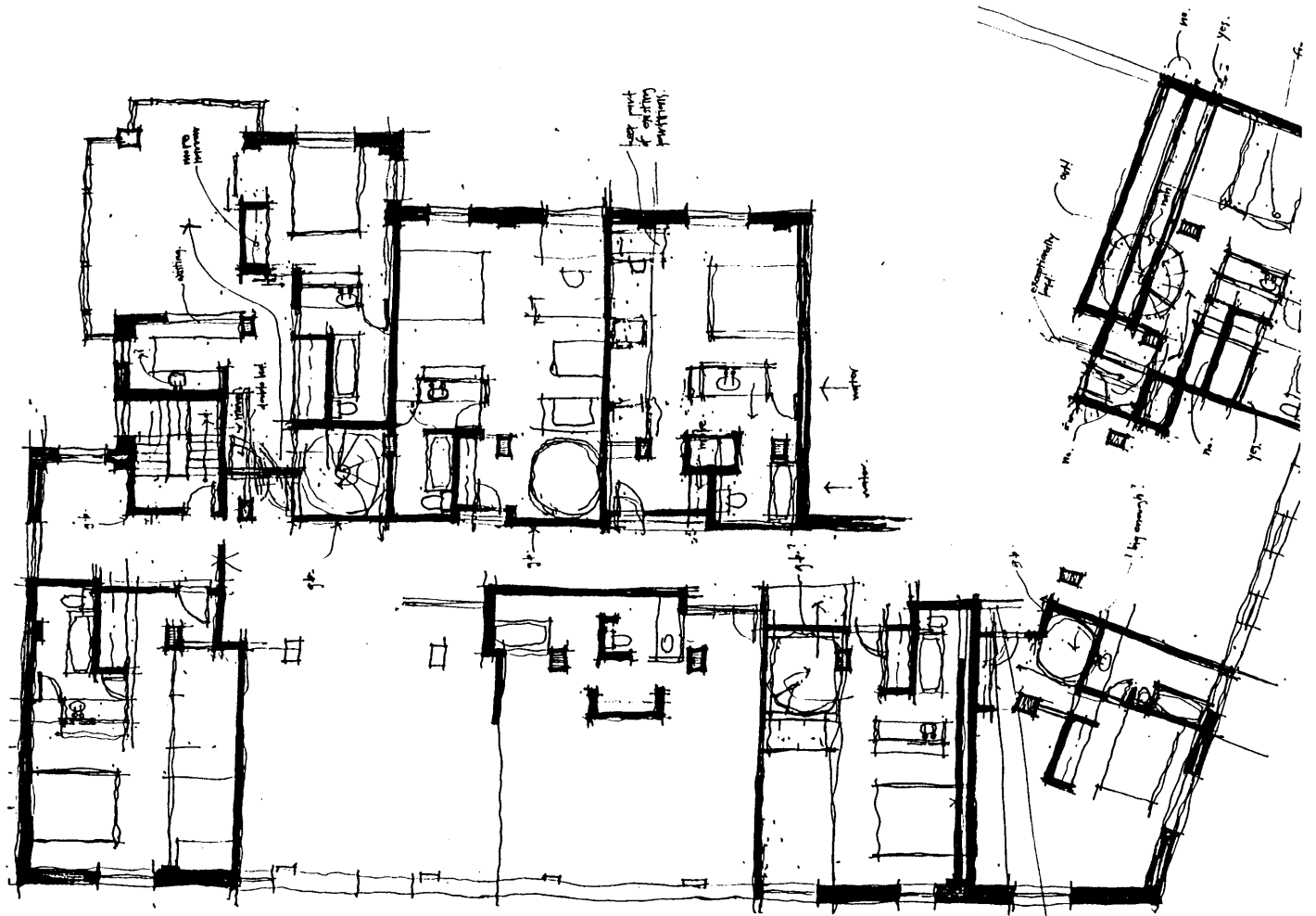
98





left: Preliminary lower level plan (1"=16').

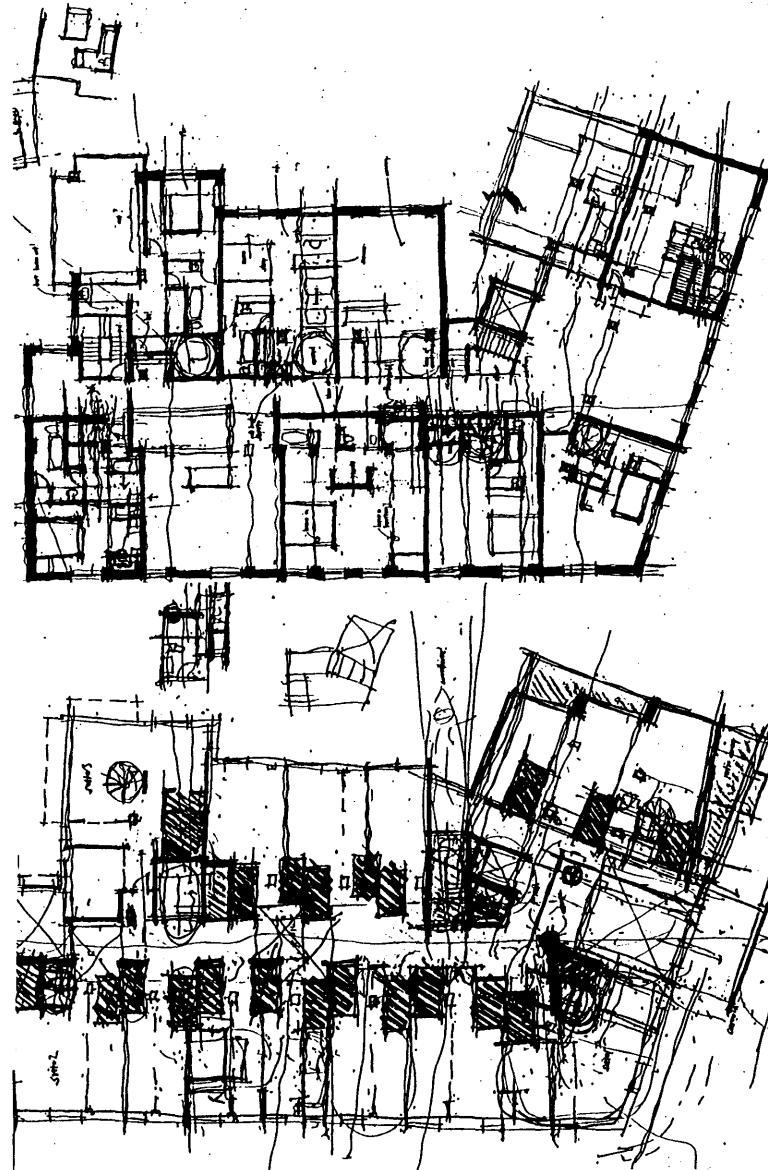
*above: Original transformation of lower level
(1"=32').*



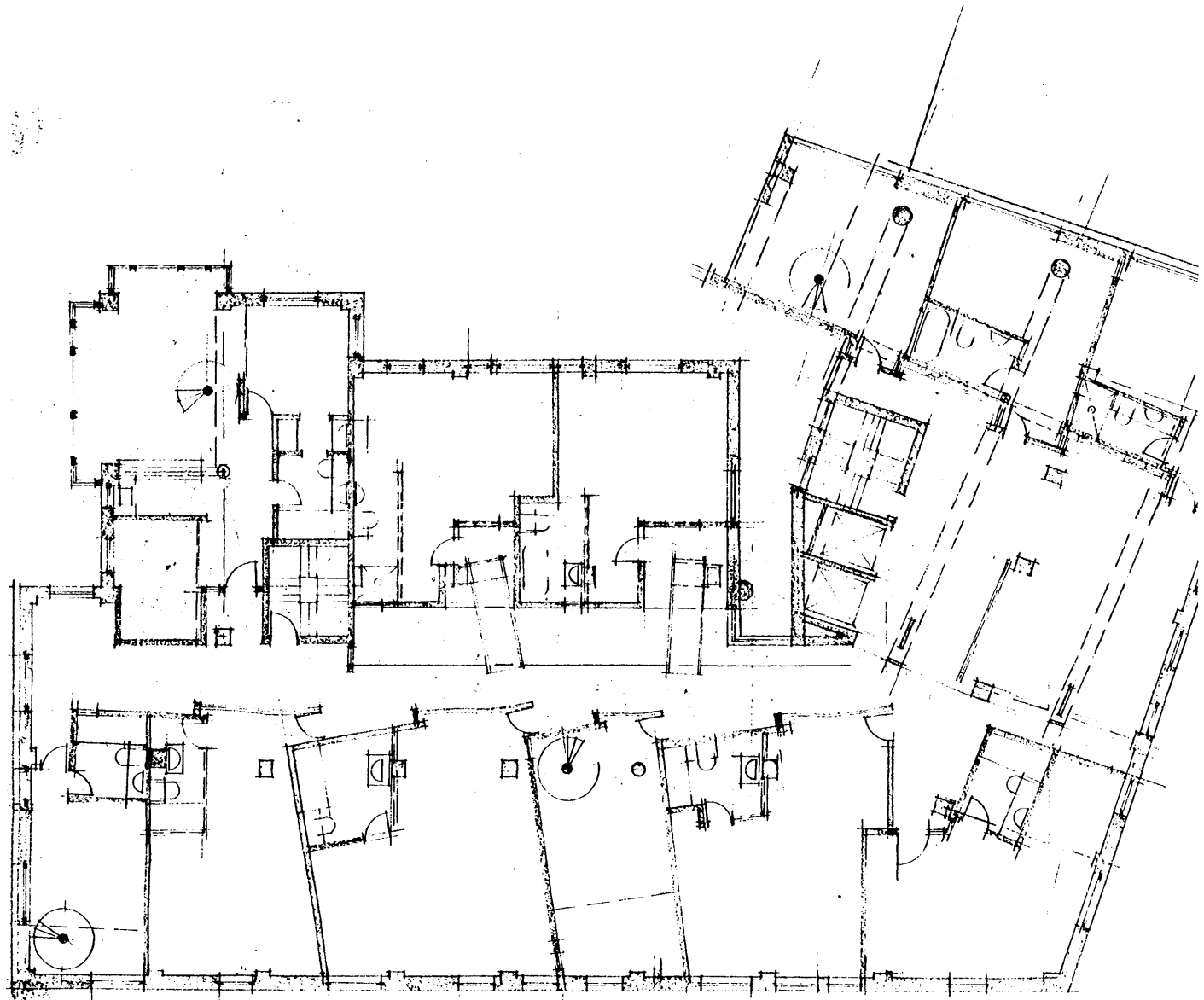
*left: Upper level plan design sketch (1"=16'); fully
orthogonal exploration utilizing light from
glass block stair cores in hall, inhabited plan.*

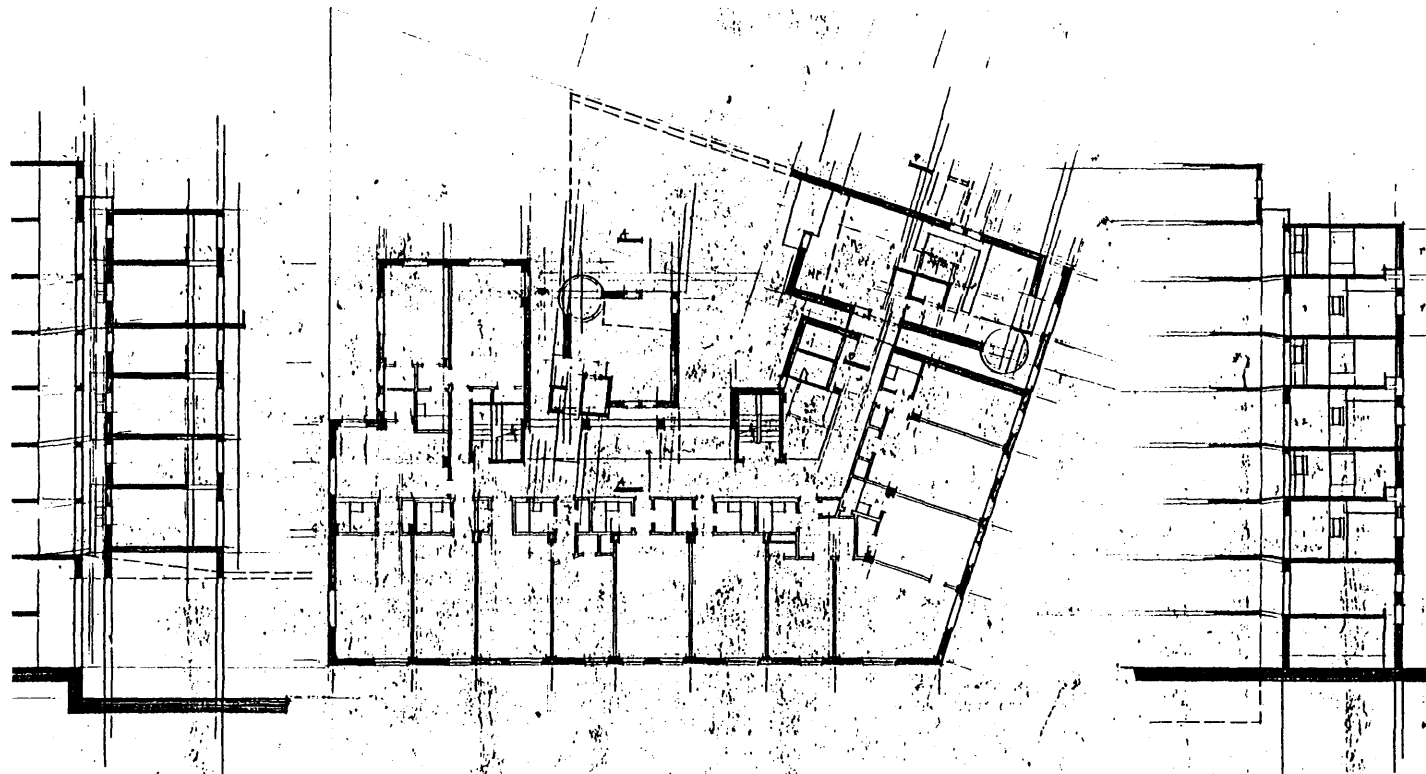
*above: Plan sketch (1"=32'); exploration of bathroom
placement and inhabitation of dwelling.*

*right: Plan sketch (1"=32'); exploration of corridor
definition and common spaces.*



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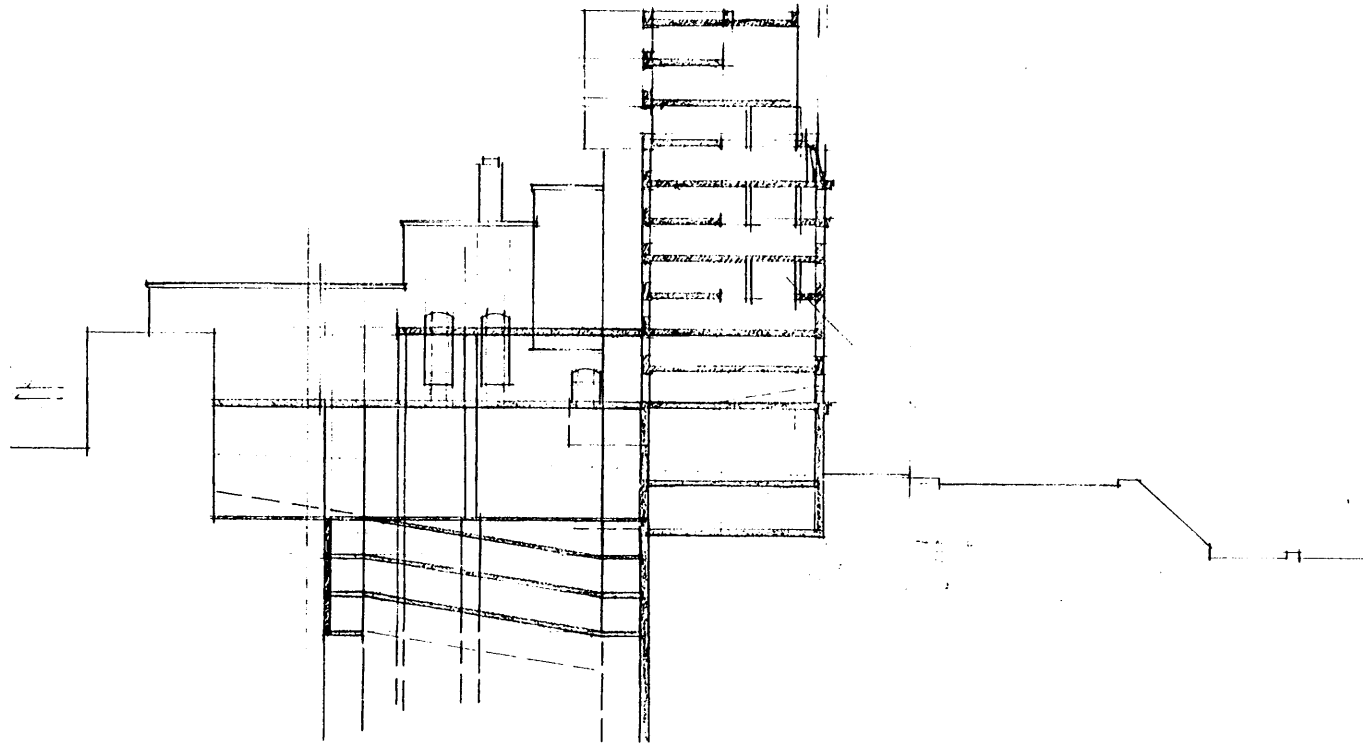




103

left: Preliminary upper level plan (note rather chaotic use of partitions).

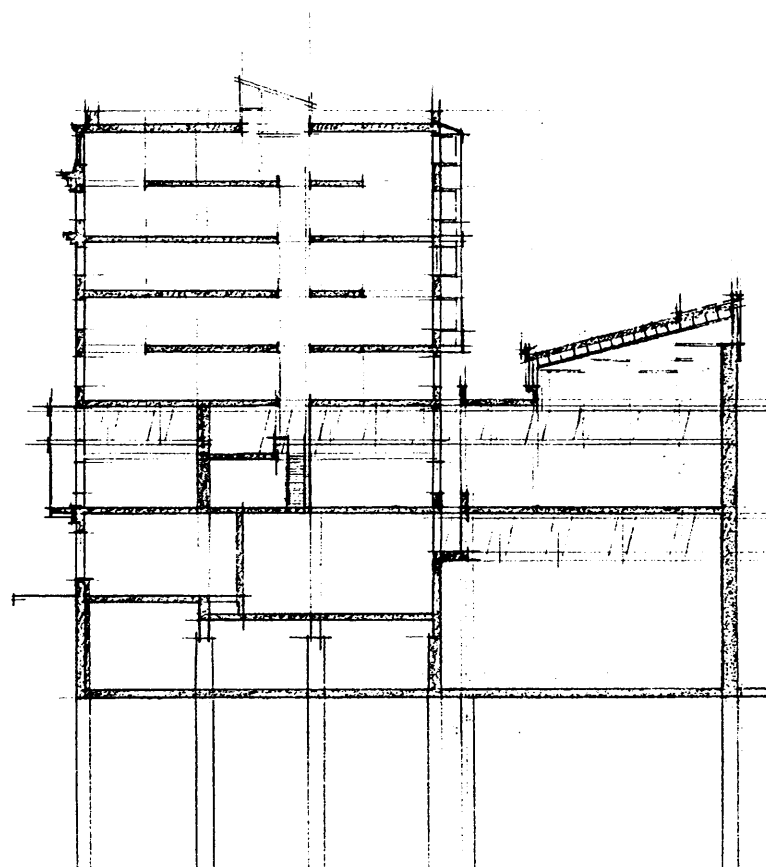
above: Original plan transformation defining courtyard and minimizing intervention.



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left: Preliminary north-south section (1"=32').

above: Preliminary east-west section (1"=32').



105



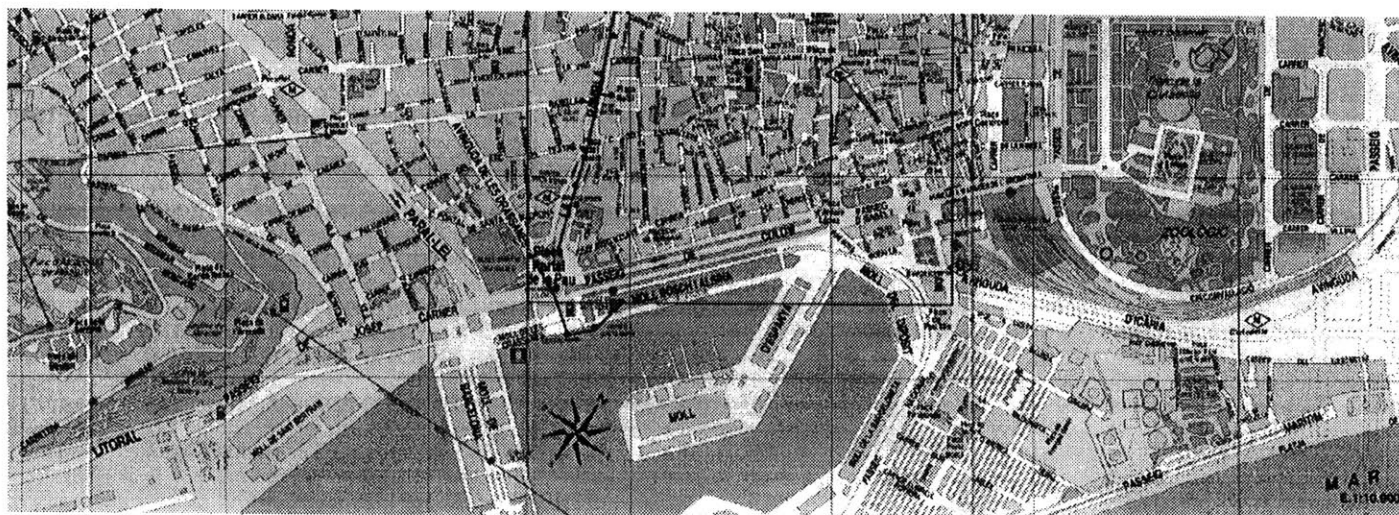
*above: Swimming and diving venue for 1992
Barcelona Olympics.*

Barcelona: A Visitor's View of the Olympic Redevelopment¹

Kevin Lynch, in 1959, was one of the first to outline the concept of imageable landscapes explicitly in his book, Image of the City. In it, Lynch refers to imageability as that aspect of the city which is immediately recognizable, lending character, form, and organization to its large-scale features (boundaries, landmarks, major thoroughfares, social heirarchies, etc.)

I would further assert that it is the collective memory of a society which is directly imprinted on the imageability of the environment. What becomes

1. This paper was developed in conjunction with a class taught by Prof. Ákos Moravánsky entitled 'Principles and Problems of Historic Preservation' taught at M.I.T. during the fall term of 1993.



important in the construction of a fully-formed (physical *and* social) environment is the continuation or extension of the structure of memory in order to transform an image.

In the case of the redevelopment of Barcelona for the 1992 Olympic Games, there is a clear case to seriously examine the imageability of the city. Barcelona, in hosting the 1992 Olympic Games played a role as international destination and ambassador to the world. The Olympics necessarily provided the city with a goal to redevelop and revitalize its decaying areas.

left: Map of the city along the Mediterranean. (Taken from brochure published by Barcelona Department of Tourism, ©1992.)

Reborn from the ashes of a serious recession, Barcelona literally transformed her image from a dying city to a center of living culture. Preceded by crushing oppression of the Catalán culture by the Franco regime, the city, in its impoverished state, acquired numerous public lands. This property in hand, the city proceeded to embark on a mission to recapture its essence. This was accomplished through public works projects (stadiums, parks, housing) designed in many cases by outside architects.





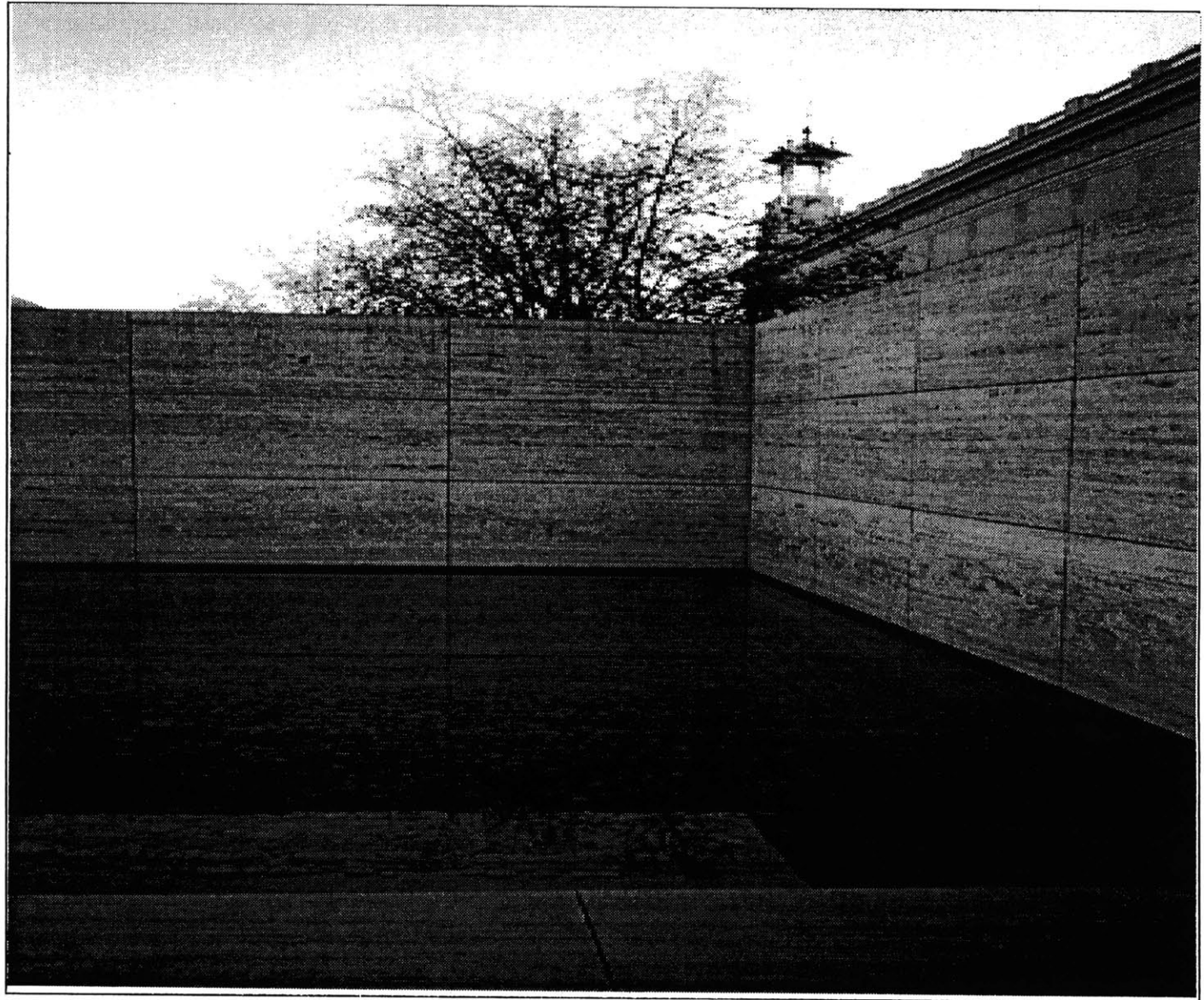
left and above: Cobi, the universal spectator designed for the Olympic Games by Mariscal. (Taken from subway passes, Barcelona Department of Transportation, ©1992.)

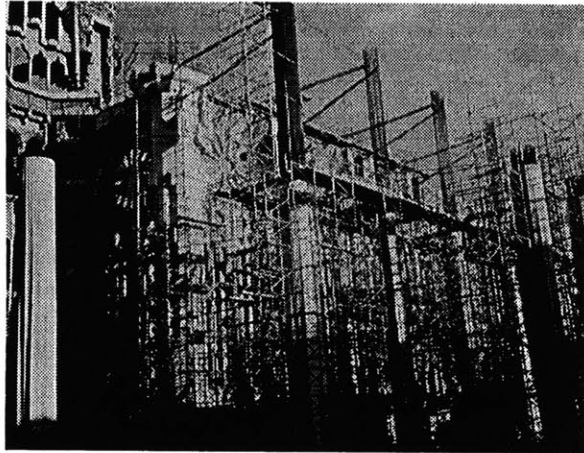
Because outside architects provide much of the new design material in this instance, it becomes clear that the city is indeed imageable in an appearance sense, but is this imageable appearance in reality only skin-deep, rather than the collective cultural sense as suggested by Lynch?

Using the vehicle of the visitor to investigate, this research explores further the idea that the structured environment of a completely foreign place is often very perceivable to an outside observer, either through previous experience (an extension of memory) or prior contact (a continuation of memory). The visitor is also appropriate in this case since the Olympics drew so many people new to the Catalan culture.

The sites chosen for in-depth analysis in the city include: the Passeig de Colom (Moll de la Fusta) which is a waterfront pedestrian park by Manuel de Solà-Morales (1986), and Superunidad 6, which occupies the western edge of the Olympic Village (1988 Martorell, Bohigas, Mackay, Puigdoménech). Additionally, the reproduction of the 1929 Mies van der Rohe German Pavilion and the proposed

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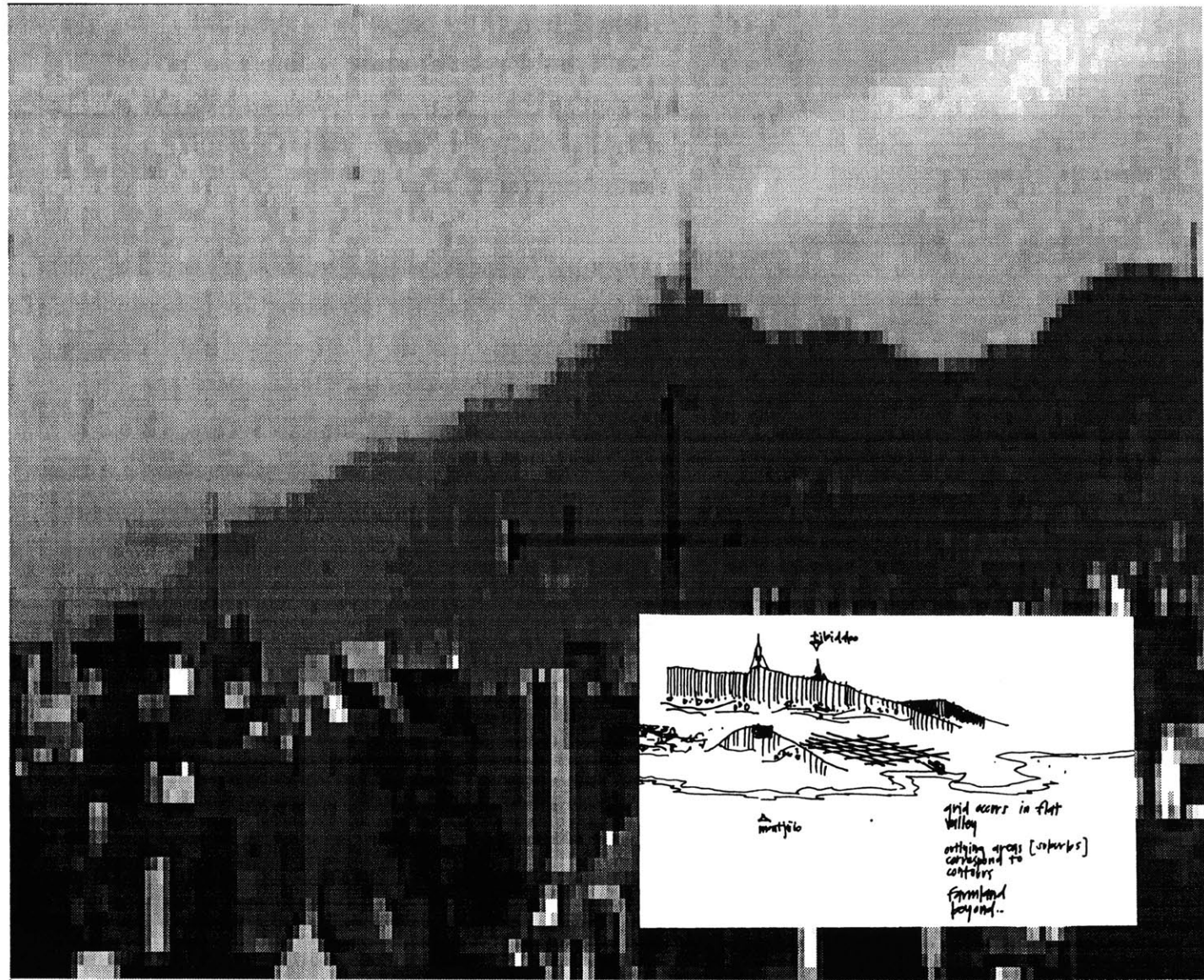
left: Reconstruction of 1929 Barcelona pavillion, Mies Van der Rohe. Reflecting pool, wall, and palace of Alphonse XIII.

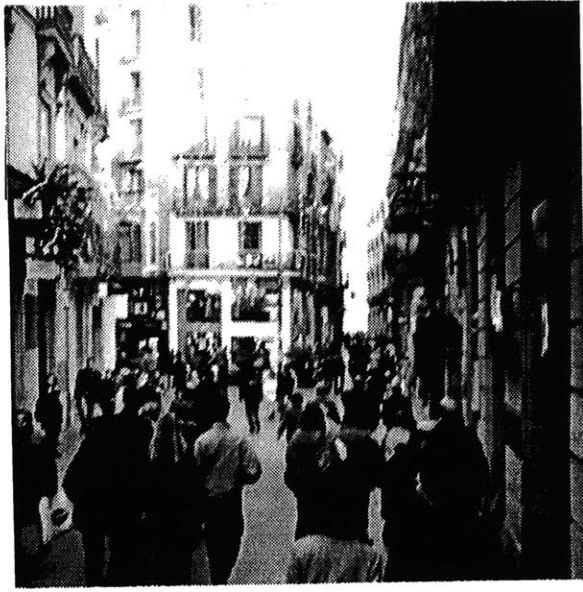
above: Ongoing construction of Sagrada Familia, Gaudi.

completion of the Sagrada Familia Cathedral will be considered as contrasting examples of how conventional restoration contrasts with the transformation inherent in the Olympic redevelopment.

Olympic (re)designs are specifically geared to affect the city where its built infrastructure is most in need of repair or replacement. These sites are also considered to have the greatest potential as outlets for urban expansion. Individually, all four schemes already contained artifacts from the city framework: varied frameworks resulting from previous development. Design of this sort necessarily requires awareness of previous artifacts of the city, while simultaneously introducing newer elements which establish a dialog (in continuation or opposition) with the existing city fabric. The projects chosen for this research will be examined to show their progress over time, with the specific goal of understanding the limits of continuing the city fabric.

Continuity and transition matter from the standpoint of preserving an architectural identity (in this case an





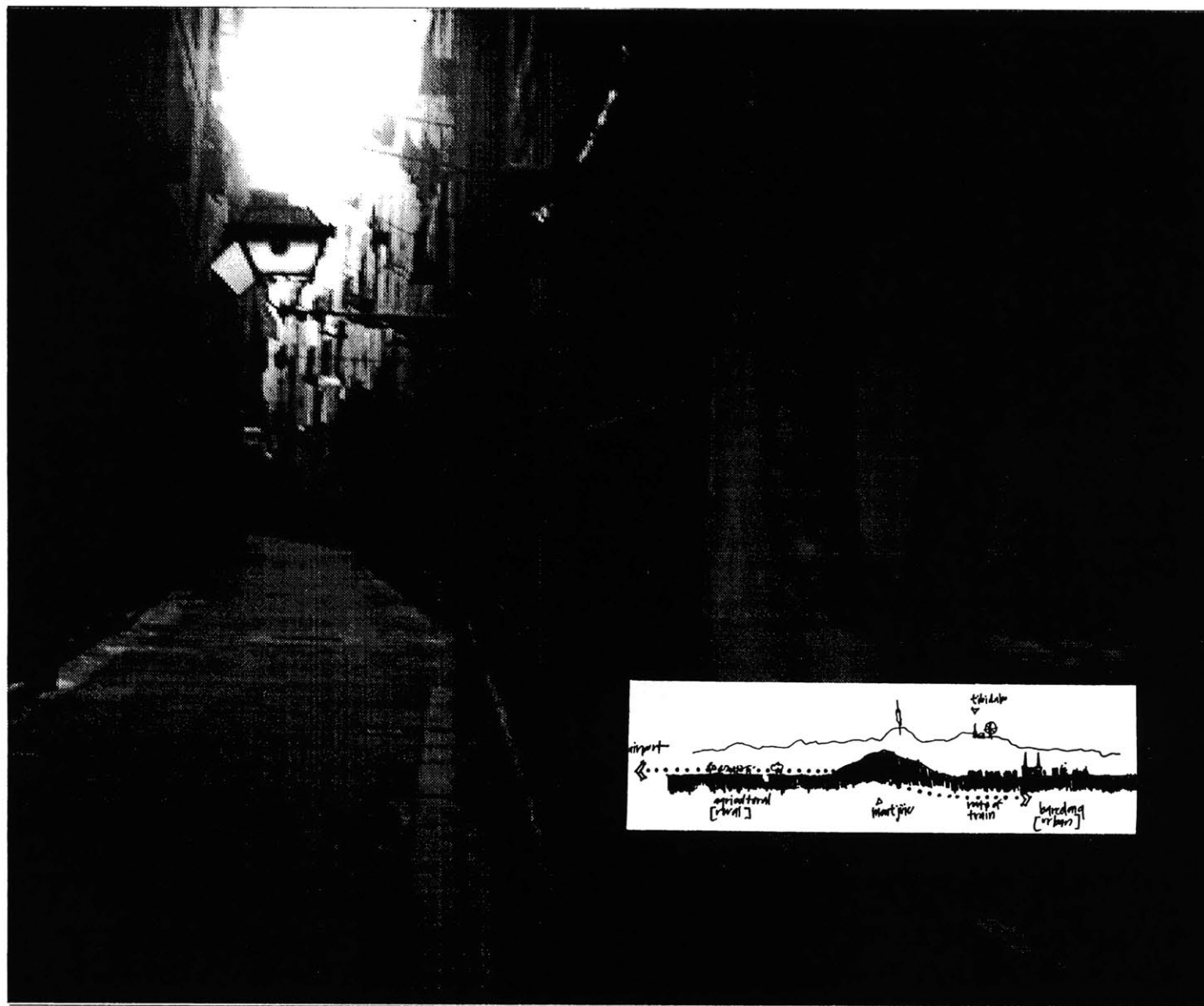
left: Enlarged detail of cranes at work in Barcelona.

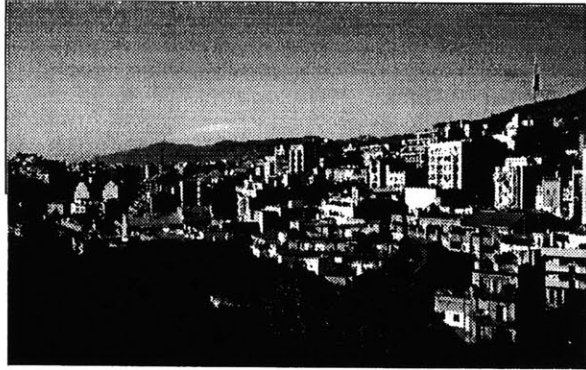
inset: Aerial sketch showing city organization.

above: Customers in La Rambla marketplace.

urban culture); this identity represents a direct reflection of the specifics of a place and its inhabitants. Clearly, preservation in this light is a humanistic attitude of preserving individual identity (as opposed to a building's), an attitude which relies upon fragments rather than complete entities.

As the visitor builds an impression from reconstructed portions of the city, a sense of an evolving consciousness is configured from the visitor's perceptions of new development; this sense contrasts with ongoing uses in the city. An opportunity to guide perception on such a grand scale such as Barcelona seldom occurs, being the product of either a singular vision or a singular event. This experience is shaped from the moment one enters the airport, a facility transformed through redevelopment in the early eighties, and is guided by successive exposure to old city fabric and transformations within it. Travelling by train from the airport to the city, full automation meets hand labor as one glides above the farms nestled at the edge of Barcelona. These ad hoc but dense settlements





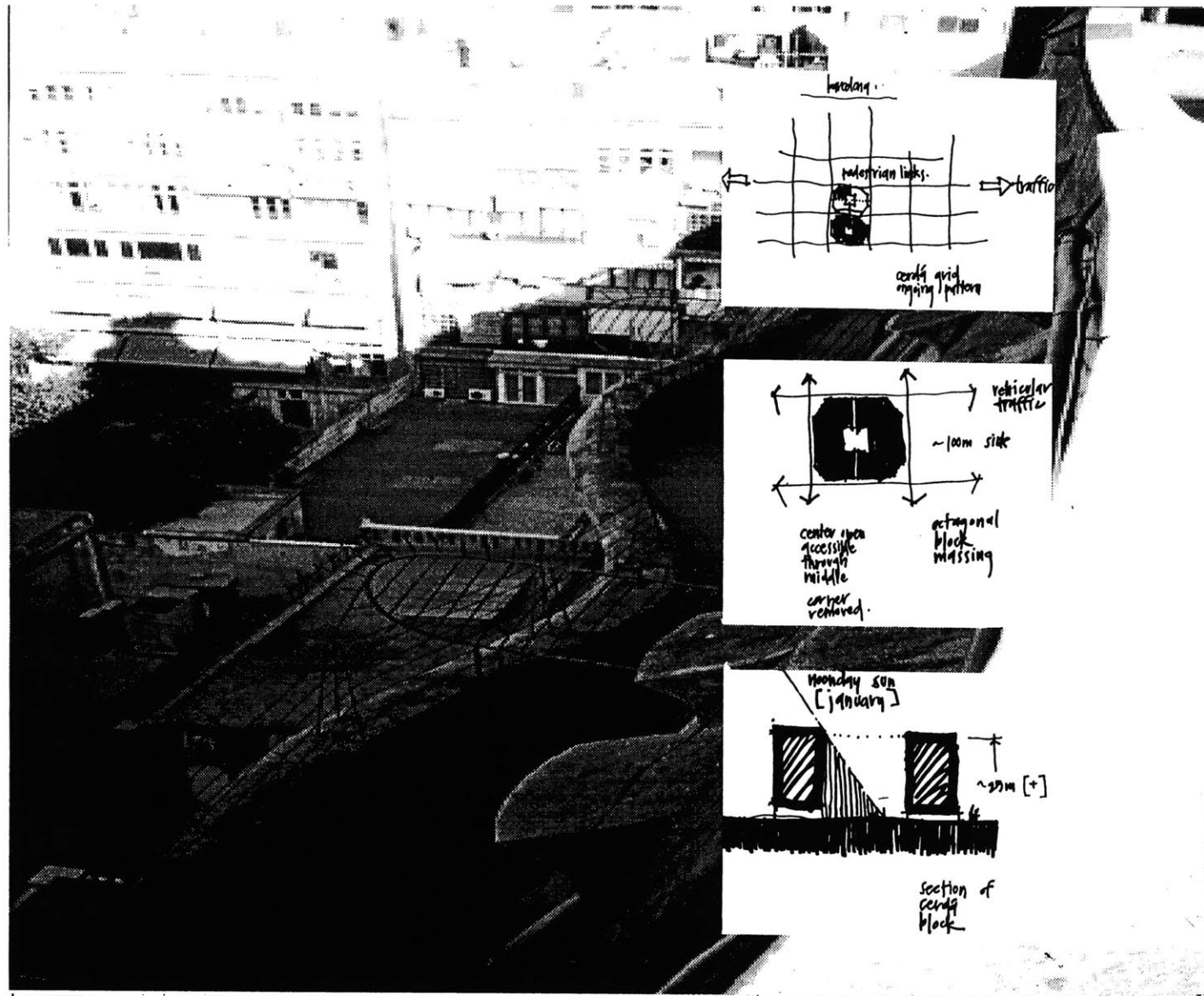
left: Quiet street in La Rambla.

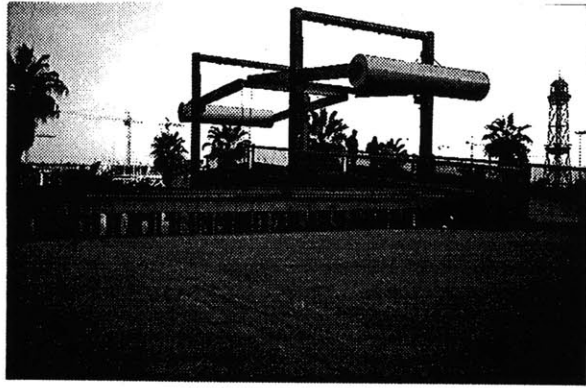
inset: Sketch of sectional experience of Barcelona.

above: View of city's edge from Parque Guell.

occupying the fringe gradually become absorbed by the features of the landscape. Low foothills then swallow the train and when one emerges again into daylight the discovery is of a completely different place, yet still exhibiting some of the qualities of the ad hoc, filled agricultural environment. Once within the city, the transition is to a more regularized urban grid, but one which is mediated at the corners, allowing further urban settlements to occur: newsstands, cafes, grocery stores, etc.

The surprise of this particular scenario is the remarkable coherence of Barcelona, despite the fact that redevelopment within this fabric occurs in the hands of many and diverse designers. With the Olympics came the introduction of several outside 'actors': architects foreign to the culture. Isozaki, Foster, Meier, and Calatrava all contributed to the milieu of ideas, while still managing to preserve some sense of the perpetuity of a cultural framework. A thread of eclecticism (in a stylistic sense) runs through the entire city and pervades the designs of the local architects as well as outsiders. This helps to separate observation of form and social use from appearance.





*left: Typical center courtyard of city block, Cerdà.
(from roof of La Pedrera, Gaudí.)*

inset, top: Street/block pattern.

inset, middle: Typical block, plan diagram.

inset, bottom: Typical block, section diagram.

above: Waterfront bridge along Passeig de Colom.

Dominant elements are felt all through the city fabric. An example of this larger order is the Cerdà street grid. Arriving in the city, this grid serves to orient and organize the public/private spaces and the scale. Another major organizer is the landscape itself. Being a sort of bowl-shaped valley at the edge of the sea, the center of the bowl allows the grid of the city to occur; while the sides of the bowl, the mountains, force inhabitation to occur laterally, along the contours of the slope.

It seems appropriate to dub the current projects under examination as a transformation of Barcelona, containing artifacts in the process of evolution or metamorphosis. They are what de Solà-Morales calls “urban interventions” not simply restored or preserved, but interchangeable with current or future use. An understanding of transformation would suggest not limiting designs to simple reconstructions. He then proceeds to describe the process of transformation:

“The architecture of transformation is conceptual since it keeps a very good record of

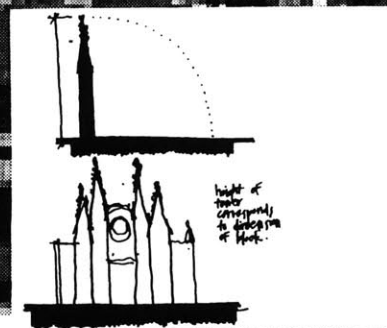


basic section : builds
collective courtyard.
continues pedestrian
link. light brought
down to center.
[sanctuary submerged]

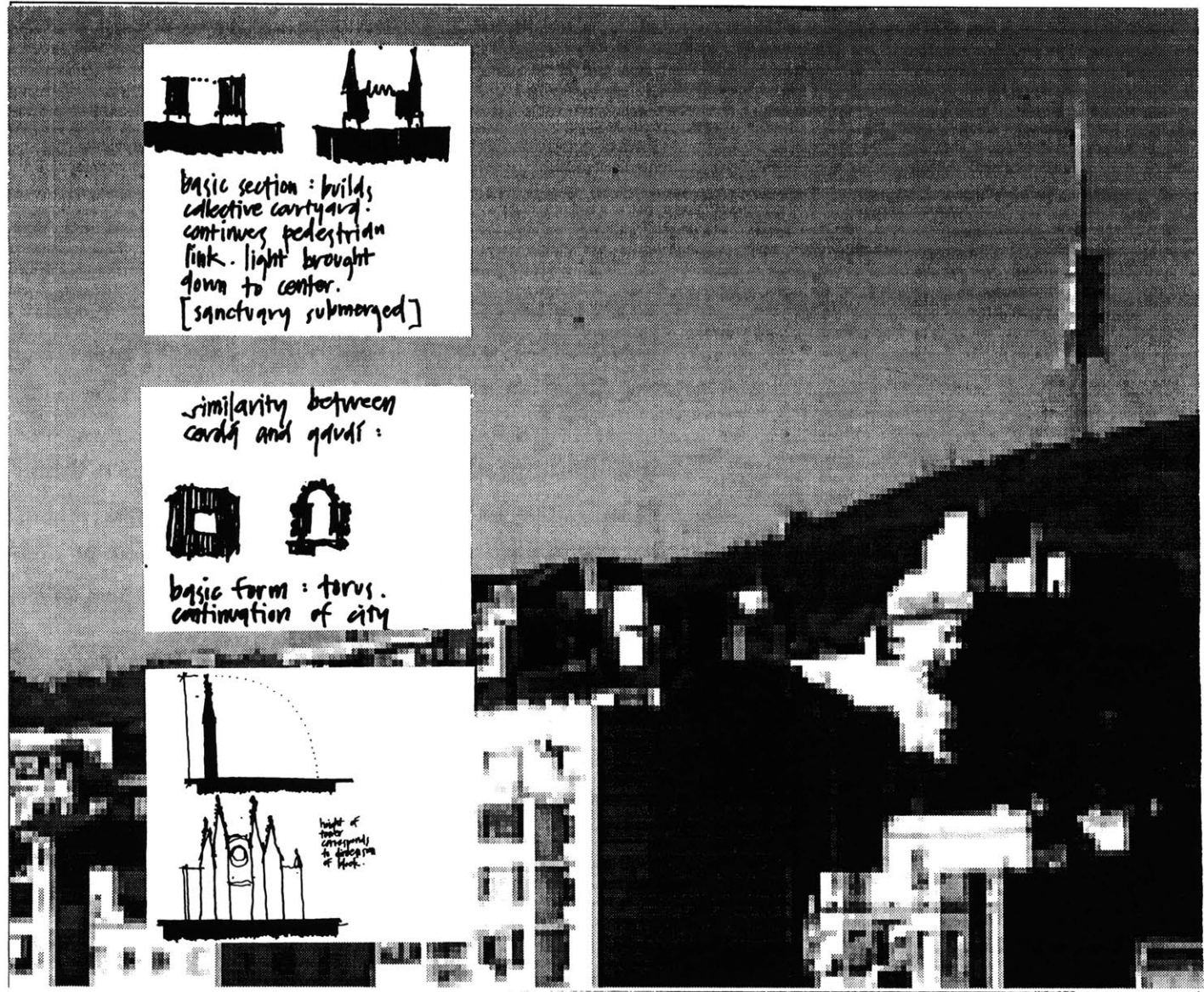
similarity between
courts and yards :

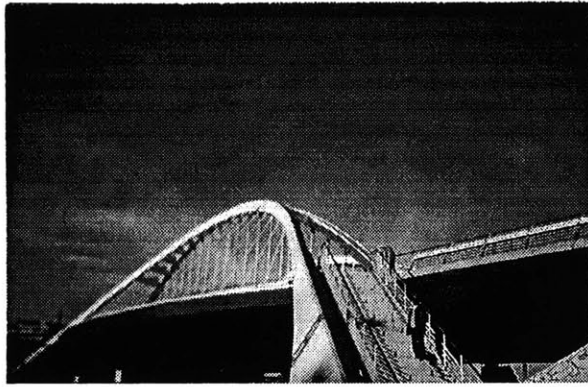


basic form : tower.
continuation of city



height of
tower
corresponds
to elevation
of Mark.





left: Communications tower atop Tibidabo, Foster.

inset, top: Sectional comparison, Cerda-Gaudi.

inset, middle: Plan comparison, Cerda-Gaudi.

inset, bottom: Elevation study. Height of spires corresponds to length of block.

above: bridge, Calatrava.

the procedure followed; a sharp awareness of what was once there, the memory of the place, accompanies this Protean change."²

Rossi describes the attributes particular to individual cultures: their collective memories:

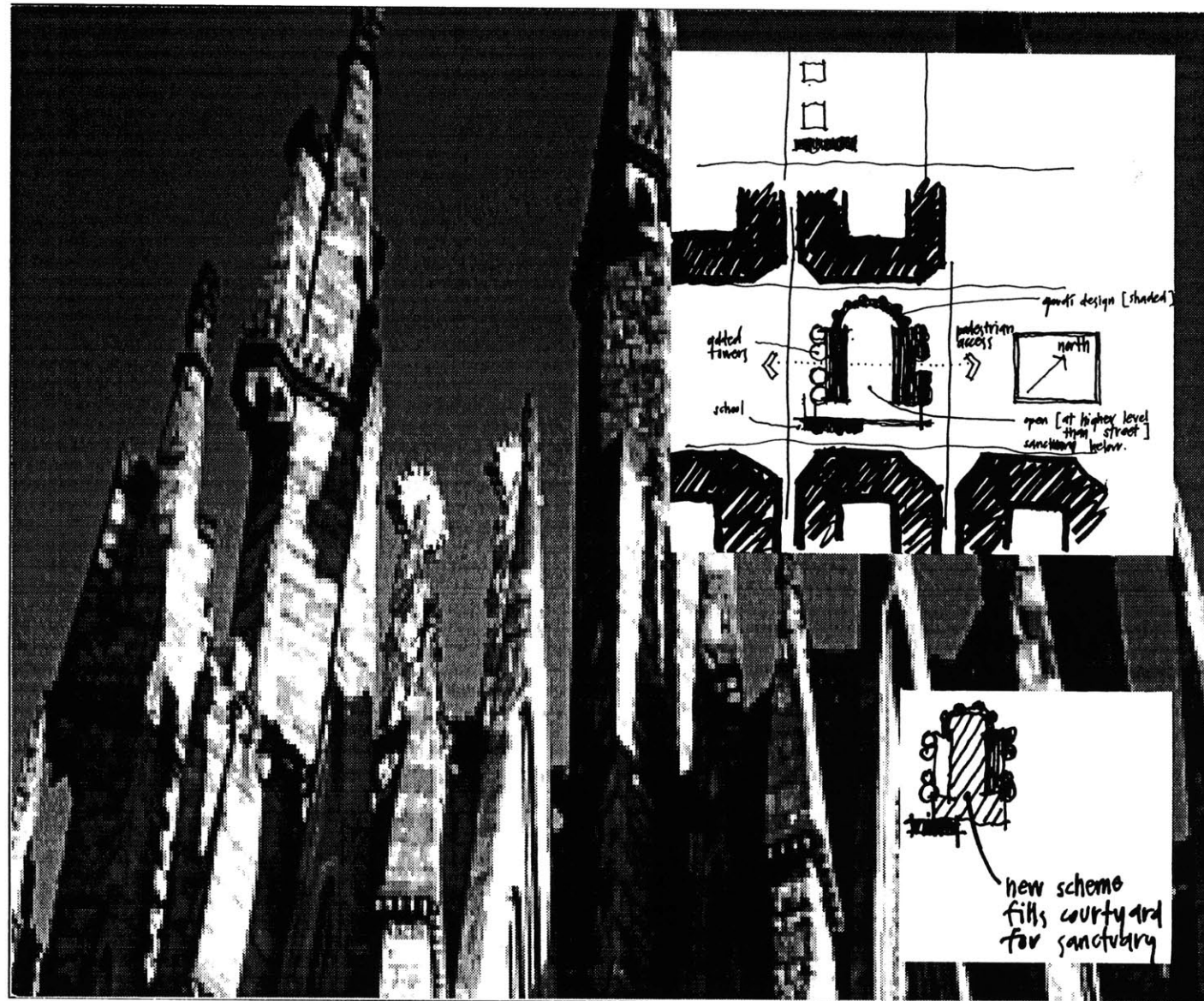
"The city itself is the collective memory of its people, and like memory it is associated with objects and places. The city is the locus of the collective memory. this relationship between the locus and the citizenry then becomes the city's predominant image, both of architecture and of landscape, and as certain artifacts become part of its memory, new ones emerge."³

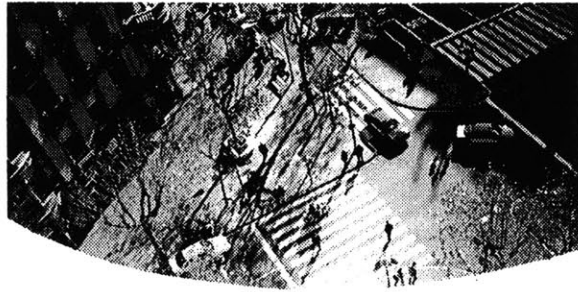
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The physical structure of the central city dates back to 1859, when the city plan was 'regularized' by the urban plan of Cerdà blocks (roughly 150m on a side, carved out with major streets in between them). In a

2. De Solà-Morales, p.43.

3. Rossi, p.130.





left: Spires in courtyard of Sagrada Familia.

inset, top: Plan sketch.

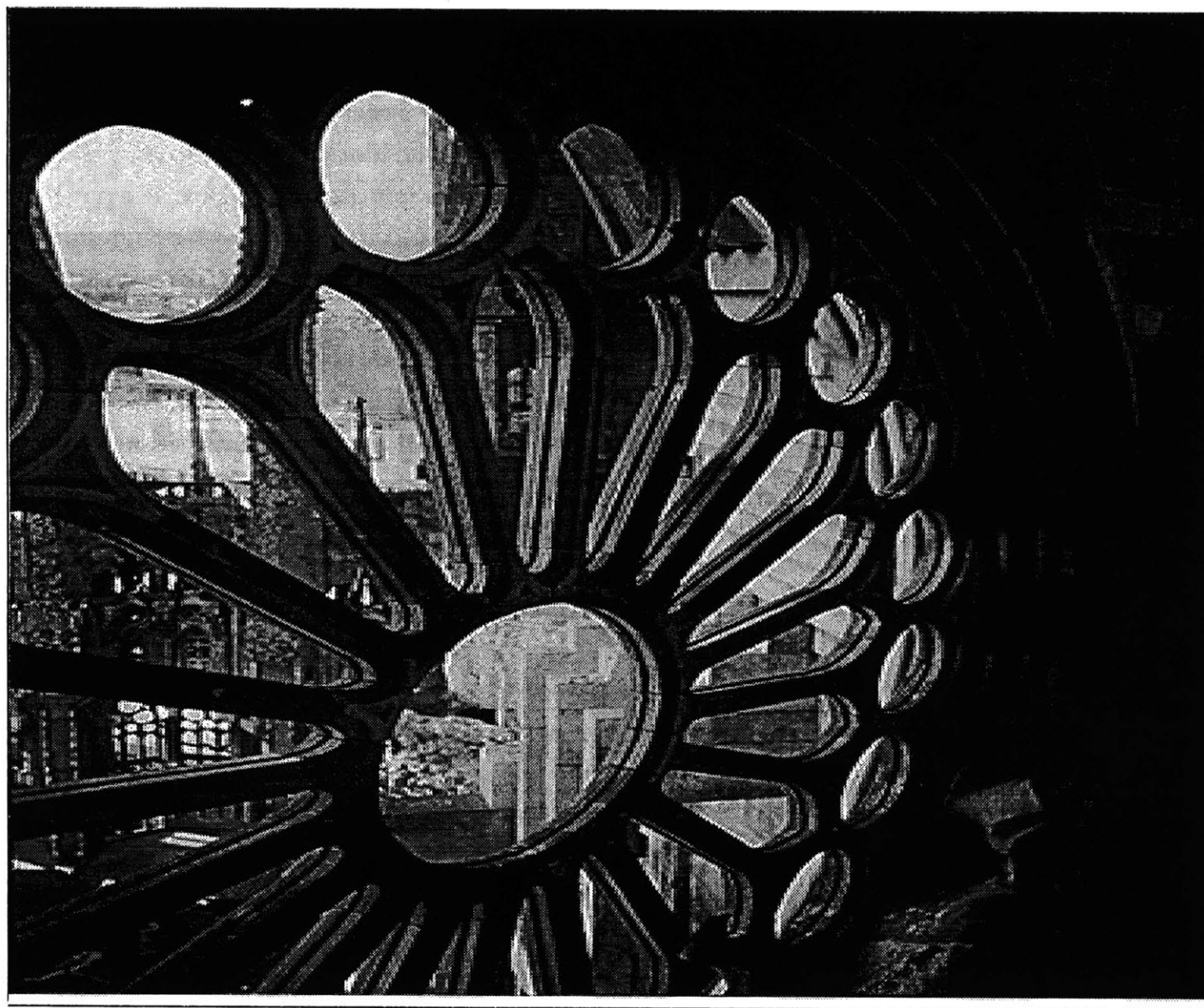
inset, bottom: Proposed completion

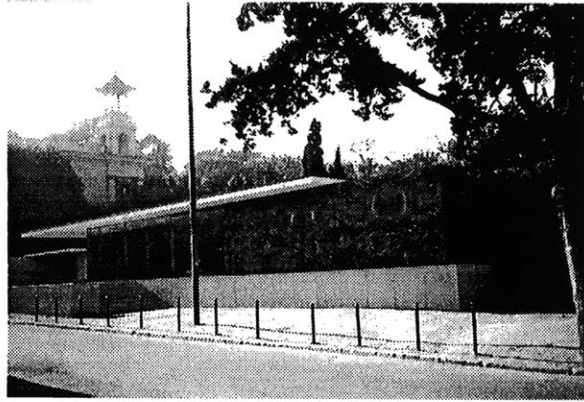
above: View of corner condition of Cerdà block. (taken from roof of La Pedrera, Gaudi.)

single block, the corners are pulled back at a forty-five degree angle, the extra space allowing for public meeting places. The center is left void for private use by the residents of the block. Entrance to the central court is through the middle of the block. The pattern of this city fabric is incorporated into the Sagrada Familia cathedral by Antonio Gaudi (1892-1926).

Sagrada Familia in its present form could be viewed as a combined product of the Cerdà grid and an ongoing attempt to complete the unfinished cathedral. The initial effect of the cathedral is its immense spires and walls, effectively building the separation which was accomplished collectively through individual buildings on other blocks. The Cerdà grid can be felt most at open sanctuary in the center of the site.

Current aims are at realizing sketches made by Gaudi concerning the overall cathedral. De Solà-Morales describes this desire to complete the form as a "holy dread of destruction". The main towers of the original are now joined by four symmetric duplicates and soon, a nave, currently under construction will 'finish' the cathedral.





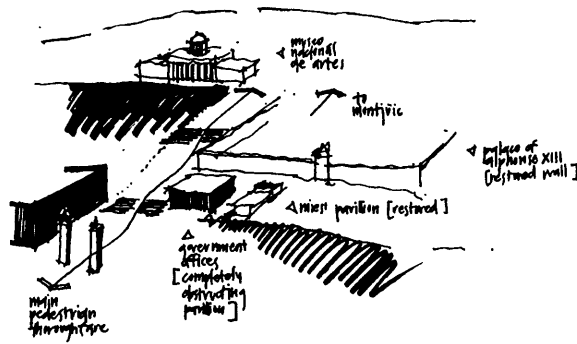
left: View of courtyard from rosette window of Sagrada Família.

above: 1929 Barcelona Pavillion.

Because design conformity in this instance is a function of appearance only, the additions to Sagrada Família fall outside the 'tradition' of resistance mentioned previously. Instead of interdependence between past and present, what results is a rather half-hearted attempt to complete a sketch. The narration of the newer form suggests perversity and garishness, being grotesque paraphrases of the originals, a commentary on the necessity to view forms as complete finished objects.

The Barcelona Pavilion has similar problems regarding reconstruction. Designed by Ludwig Mies van der Rohe, the German Pavilion of the 1929 Barcelona International Exhibition was built in the shadow of the palace of Alphonso XIII. Because of the cost of the building and the value of the materials, The original structure was returned to Germany upon completion of the Exhibition along with the Kolbe sculpture in the reflecting pool. Its present importance as a landmark of the modern movement was taken as a prompt to begin reconstruction of the site. As early as 1957 Oriol Bohigas approached Mies concerning acquisition of the design drawings, although





left: Pedestrians in the city.

above: General organization sketch of palace/
pavillion.

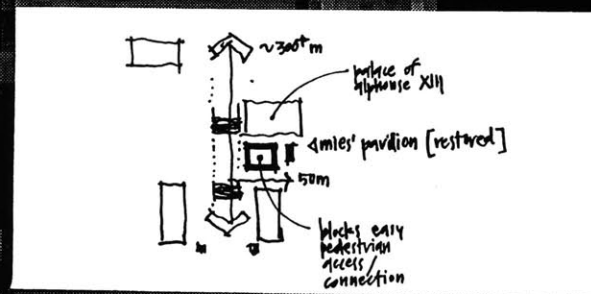
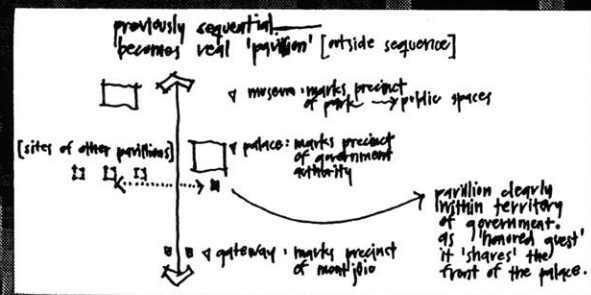
reconstruction did not actually take place until 1984-1986. The intention was that there were to be no conceptual revisions; that the building:

“should be a reconstruction which would reinterpret as faithfully as possible the idea and realization of the 1929 Pavilion.”⁴

Expansion of the city, however, had left the original site with no precise use — its transitional role in the interstitial fabric between lower Barcelona and Montjuïc was lost.

Additionally, there was the problem of permanence of the building. The original was conceived as temporary, to be used and then removed; details of the newer more permanent structure were necessarily transformed, and provision for upkeep, maintenance, and security were developed along with the program. Restoration also included a portion of the palace facade [a backdrop now famous through photographs of the Pavilion], and a colonnade directly in front of

4. De Solà-Morales, p. 118.





left: Pedestrians in La Rambla.

inset, top: Plan diagram of original organization.

inset, bottom: Plan diagram of transformed site.

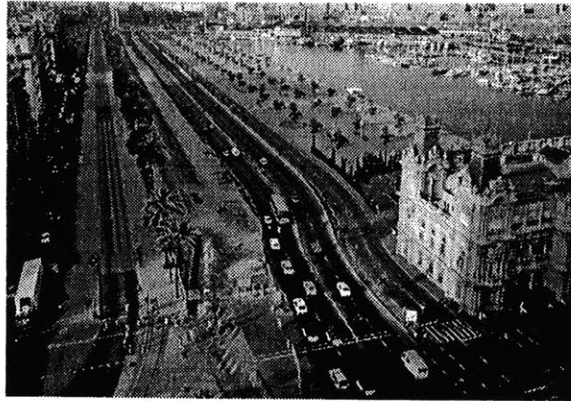
above: Pedestrians walking toward the statue of Christopher Columbus (Montjuic in background).

the site.

The artifact is meant to confer a sense of subdued monumentality; however, the site itself has transformed since the exhibition took place, the once-prime location relegated to characterless anonymity. There is also a sense of awkwardness between the Pavilion and a nondescript government building which has sprung up on the site between the Pavilion and the central pedestrian thoroughfare.

Clearly, both of these attempts at preserving and restoring monuments of a previous time are misdirected. Because of the eclectic forces which transformed the environments surrounding each of these buildings subsequent to their completion, both of these restorations were, in a way, doomed to failure. By virtue of their "snapshot" quality, only looking at appearances, the projects failed to account for the fact that the framework of the city had already transformed around the artifacts.

The remaining examples, linked to redevelopment of the city, represent an attitude more in tune with the



left: Enlarged view of map showing Passeig de Colom (Moll de la Fusta).

inset: Diagram of La Rambla (plan).

above: View from Columbus Statue (taken from De Solà-Morales, p.71).

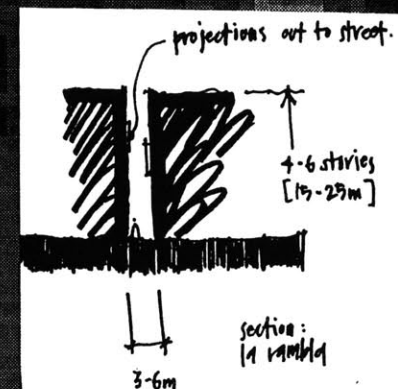
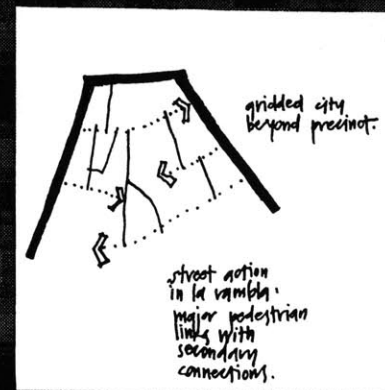
trans-figurative forces of the city. A key distinction between these current examples and the previous two is the fact that the infrastructure of the projects has been reinterpreted to match a modern set of uses, most notably denser traffic and occupation of the site. Note also that these projects embody a combination of both physical and social actions.

Take for instance the Moll de la Fusta, a pedestrian zone close to an inlet of the Mediterranean. Undertaken to reclaim a portion of the city's waterfront, it had the difficult task of fitting into a site which was seemingly inadequate to contain the program. De Solà-Morales describes this process of compressed development as "insertion":

"Reassembling the ruins of a derelict building, an insertion becomes more of a metaphor than a reclamation."⁵

This metaphoric sense stems from the fact that an "inserted" project can be likened to its predecessor,

5. De Solà-Morales, p.67.





left: Headlights shine through grating on drawbridge.

inset, top: Plan diagram of La Rambla.

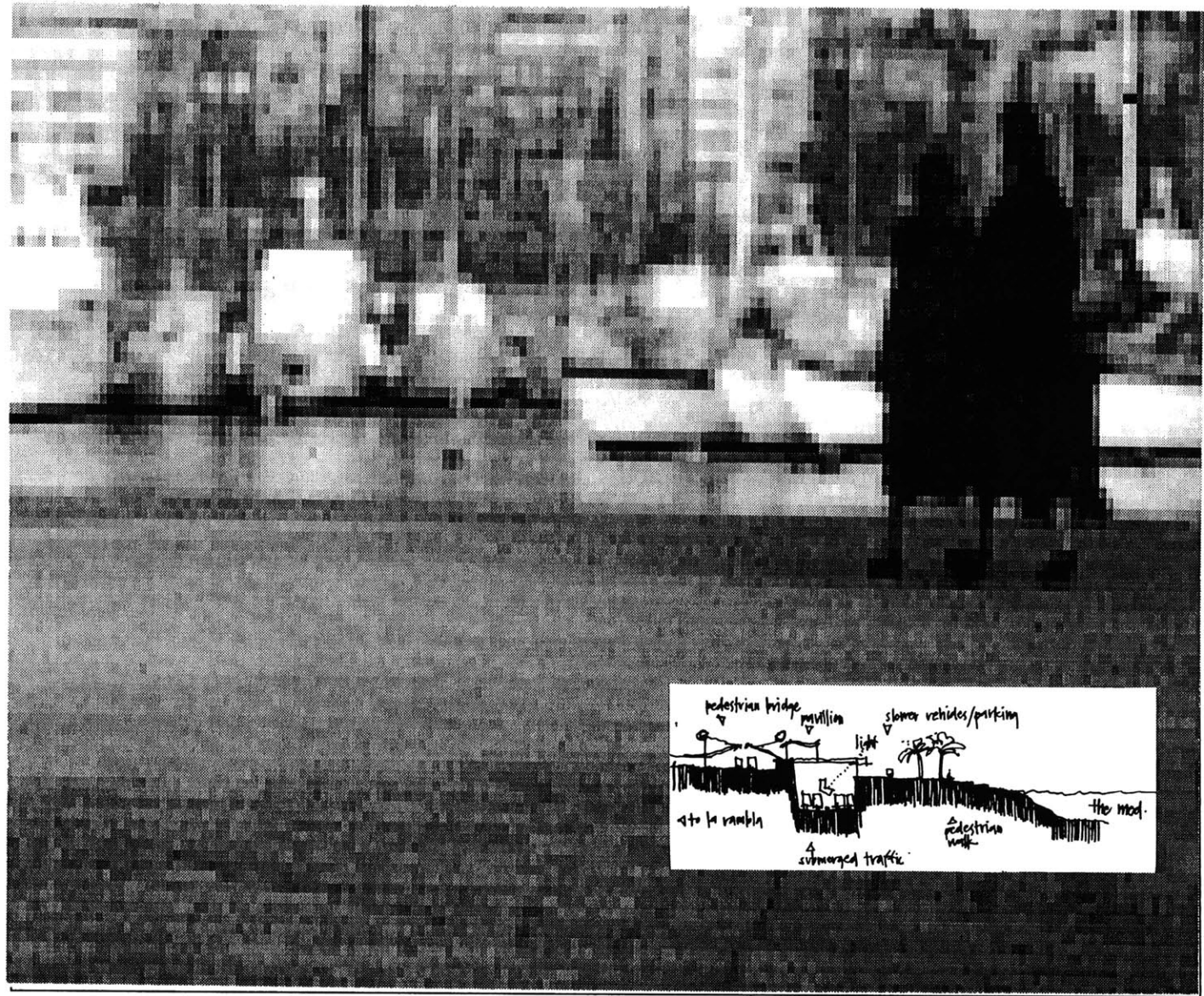
inset, bottom: Section diagram of La Rambla.

above: View from bridge over depressed vehicular thoroughfare.

despite the differences in form between old occupation and completely new development. However, the dominant carry-over trait of the site is social use.

Physically, the project lays claim to territory above the busy urban thoroughfare. This concept of air rights and the need for this kind of density and overlap are an urban trend. Socially, the promenade is simply an extension of the site's previous use, allowing the metaphoric reference to its previous existence as an active waterfront. One of the major difficulties confronting the site is the fact that the 'city front' as it might be called — a sort of end facade of the city facing the project — stops short of reaching the water by roughly fifty meters. The other difficulty is connection along the water between La Rambla and Barceloneta. This project employs two schemes to fuse these disparate [perpendicular even!] intentions, each being a reflection of existing artifacts and frameworks and an introduction of entirely new patterns.

At opposing ends of the pedestrian mall [roughly 1km long] are a monument to Christopher Columbus and a





left: Women walking along waterfront.

inset: Section diagram of Passeig de Colom.

above: Pedestrian mall with pavillions.

sculpture by Roy Lichtenstein, and both artifacts serve as a spatial framework to identify scale and location of the site. Visible beyond the Columbus statue is Montjuïc to the west; the Lichtenstein, by contrast, begins the orientation in the opposing direction, toward the Zoological Gardens. The polar dialog is all the more evincing due to the temporal nature of both artifacts, each very representative of its place in time. A similar journey occurs between La Rambla [the oldest surviving section of the city] and Barceloneta, developed only during this century. The compressed time scale is in fact also mediated by the neutral promenade.

Pedestrian access which was once tenuous along the water when it was crowded by traffic is enhanced through increased dimension of the path, now completely separated from cars, and the introduction of pavilions. The site is further connected back to La Rambla with the intent of capturing the experience of the older section of the city and linking it to the water [which was its original function: an anti-flooding drainage ravine].

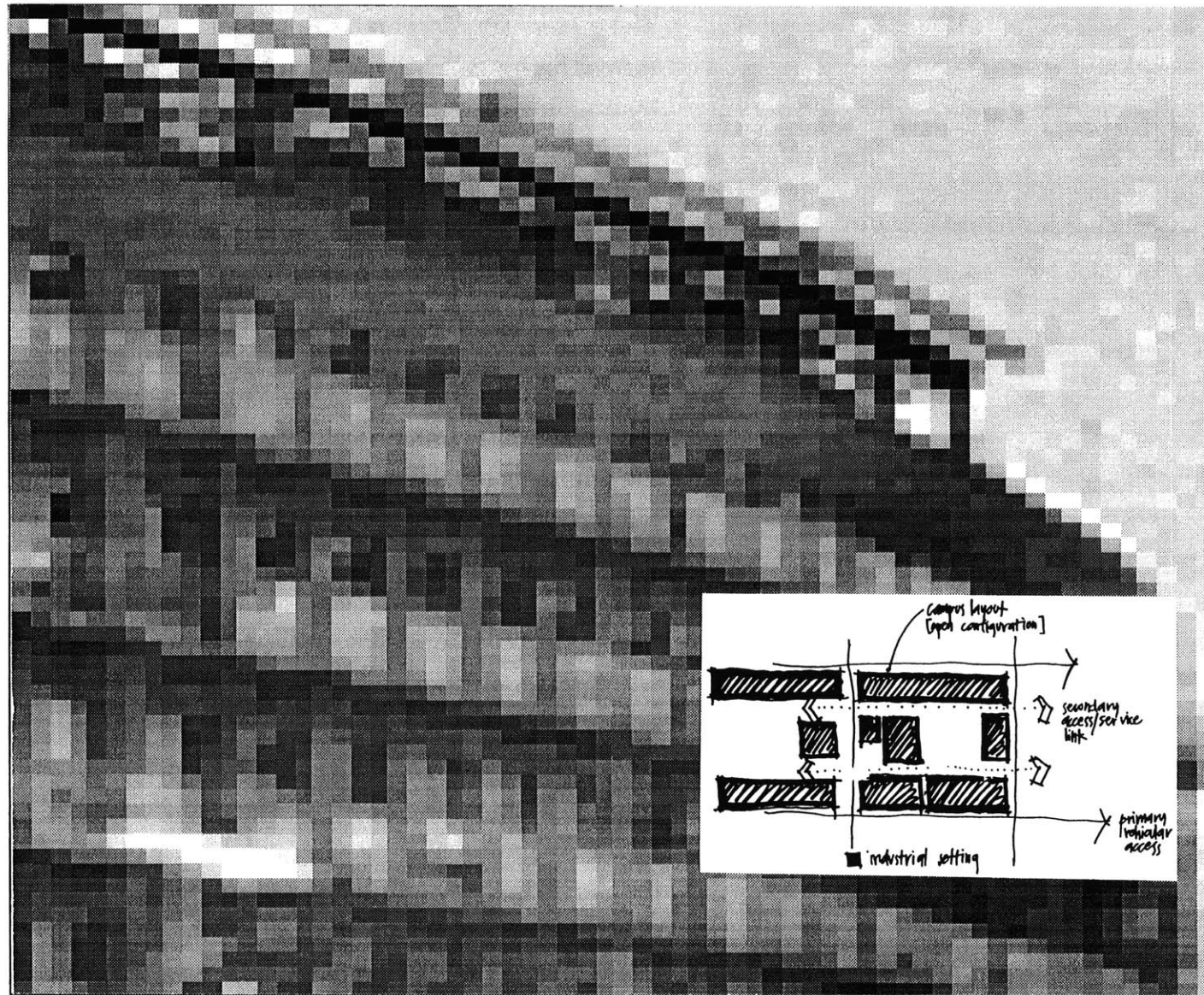


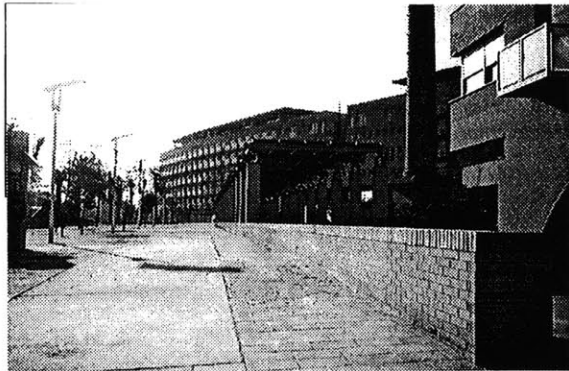
left: Map enlargement showing area of Olympic Village.

above: View of Superunit 6, seaside.

The present physical organization retains scars of the former highway which divided the city from the sea. By building up over the highway with the mall, the original three row scheme of traffic-parking-pedestrians is maintained. The sealing off of the highway is not complete, however — the highway is reminded of the presence of the mall through periodic openings to the sky. The framework is completed by two drawbridges at either end which serve to connect pedestrians from the city to the sea, and which provide another unit of scale on the site. Physically, the remnants of the manufacturing warehouses are reinterpreted in the open-air frames of the commercial pavilions along the mall.

The Olympic Village [Nova Icària] is by contrast filled with greater physical evidence of its previous existence. Before its life as the heart of the Olympics beyond the Games, Nova Icària in its most recent use was a manufacturing district, separated from the sea by the Avignuda d'Icària. Gradual decline of the industries in the neighborhood prompted acquisition of properties along the waterfront by the government. Crowding and saturation of the built area of urban





left: Closeup of balconies of Superunit6

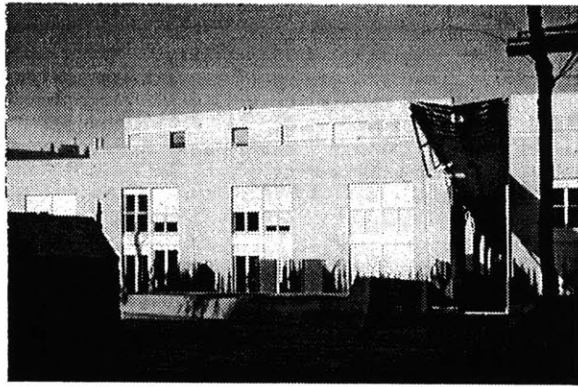
inset: Diagram of typical commercial/industrial block.

above: Pedestrian street view, Mediterranean side.

Barcelona suggested utilization of this less restricted area for housing, reconstituting the infrastructure of this area of the city. Untreated sewage from the neighborhoods surrounding Nova Icària was released directly into the sea requiring cleanup of the harbor. In its place are left crystal clear pools as a reminder of this now-precious resource.

Starting points for the transformation of Nova Icària are the traces of the previous forms of the warehouses and the manufacturing district developed [once again] within the Cerdà grid. The scale and forms of these warehouses are preserved in the design of Superunidad 6 through its facade elements and exterior organization. The layering of exterior spaces in the manufacturing setting [service access, loading area/dispatch, campus-type building layout] is carried over directly to the new design. Basically, the spatial aggregation is achieved through a progression from the exterior mall [service access] to individual courtyards [loading/dispatch] which are built up from the agglomerations of the units themselves [campus-type building layout]. The similarity of scales between the factories and the housing is called out by





left: Closeup of entry.

inset: Plan diagram of Olympic Village.

above: Entry to units in middle of site.

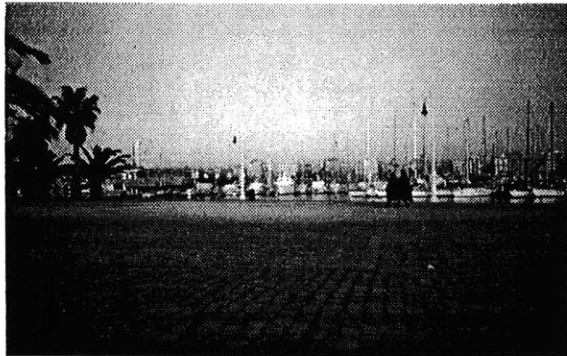
the presence of one of the original factory chimneys, an artifact which comes to stand for the scale of the intervention.

Remnants of the Cerdà plan are also present, although these begin to break away from the rigid diagram of Barcelona's core since the necessity for such a regulated plan on the city's edge dwindles. Instead, once the hard outside edges of the Cerdà plan are established the interiors of the blocks are much more free. Memories of the old district of Barcelona, La Rambla, begin to inhabit this interior experience of the site, due to the scale change and the amount of light reaching the street. Simultaneity of the past and present is further enhanced by traces of the celebration left behind after the Games. Olympic memory lingers past the event in the form of banners, poles, and even Cobi. Although occupation of the buildings themselves was low in January of 1993, it is still too early to tell whether the transformation has fully succeeded. Certainly the frameworks which have been introduced will continue to be felt into the future.

For a visitor, the energy and vitality of a city such as

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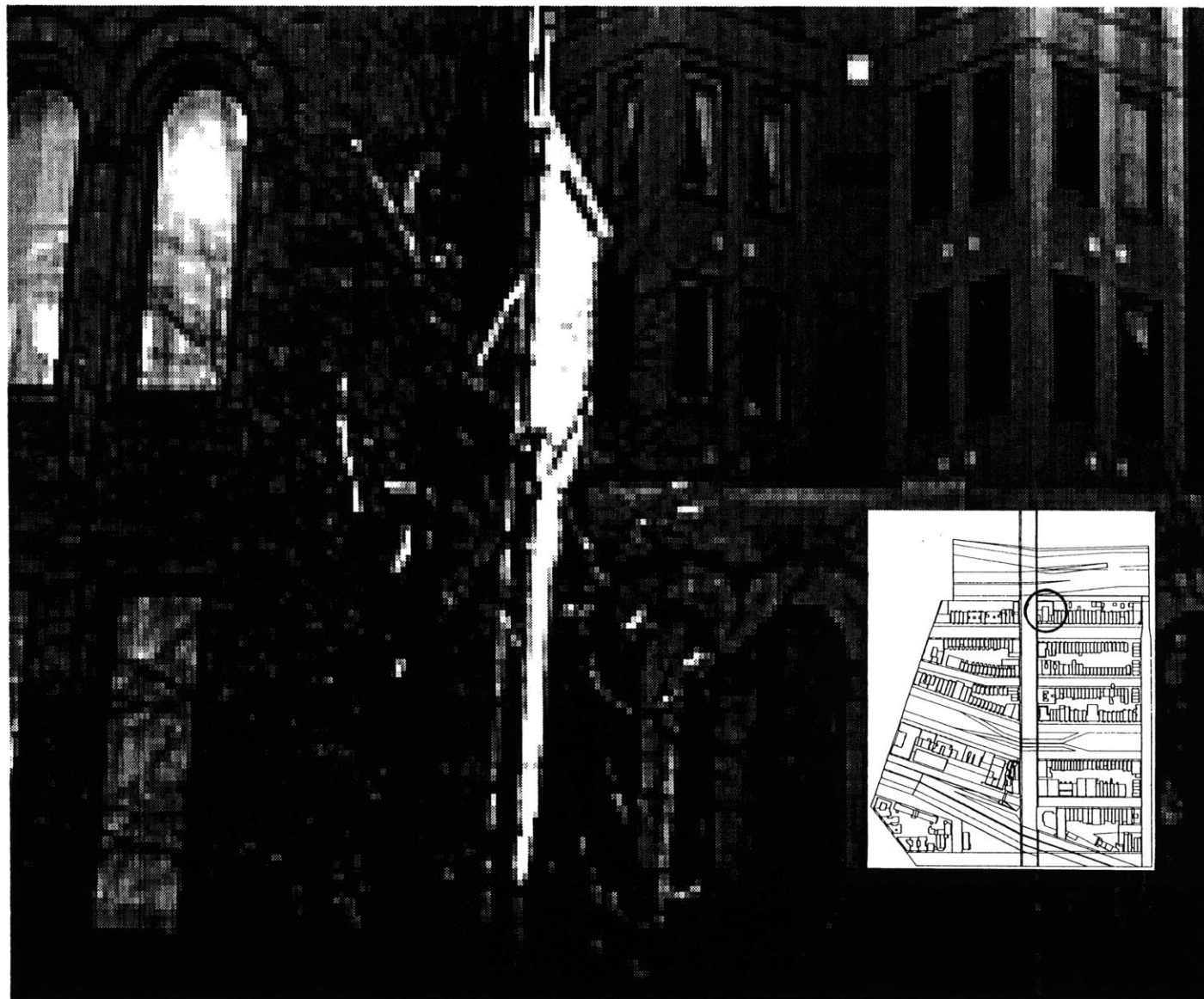




left: View of fortress wall (Montjuïc).

above: Women walking along the waterfront.

Barcelona come from its identity, which in turn is derived from the simultaneity of the temporal layers of memory. This simultaneity is aided in the case of Barcelona by this tradition of eclecticism, providing the necessary freedom to allow for temporal juxtaposition and reinterpretation. Recognizable fragments of the original city pattern make up this framework and constitute an elaborate thread of memory. Spatial and social frameworks are retained and preserved through successful schemes in Barcelona the entire city, not in individual buildings. Resistance to conventional or established norms coupled with a fierce sense of pride in culture predisposes the forms and spaces of Barcelona to have a dual identity. One part expresses modern thought for societal needs while the other reaches deep into the collective memory in order to transform identity. What evolves is the identity of the city in microcosm.



Church Court



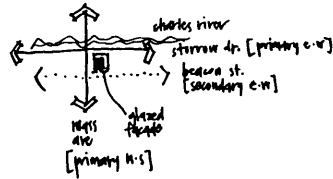
left: View through wall to courtyard.

above: South elevation of Church Court from Beacon Street.

Occupying the site of the former Mount Vernon Church (designed by Walker and Kimball 1891, built 1892) along the Charles River, Church Court by Graham Gund densifies occupation of the Boston urban environment, representing a replacement of public use (the church) with higher intensity, smaller scale private use (42 condominiums). This location, on the northeast corner of Massachusetts Avenue and Beacon Street, collectively forms with its neighbors one of the most distinct “edges” of the Back Bay: the Charles. Furthermore, because of the fact that it lies at the base of the Harvard Bridge (the only access point from the north), this area could be considered as a gateway to the neighborhood.

Acquired by Gund in 1979, the original site had burned extensively so that all which remained of the church were the west and south walls, including a tower at their junction. Designers chose to incorporate what was left after the fire,





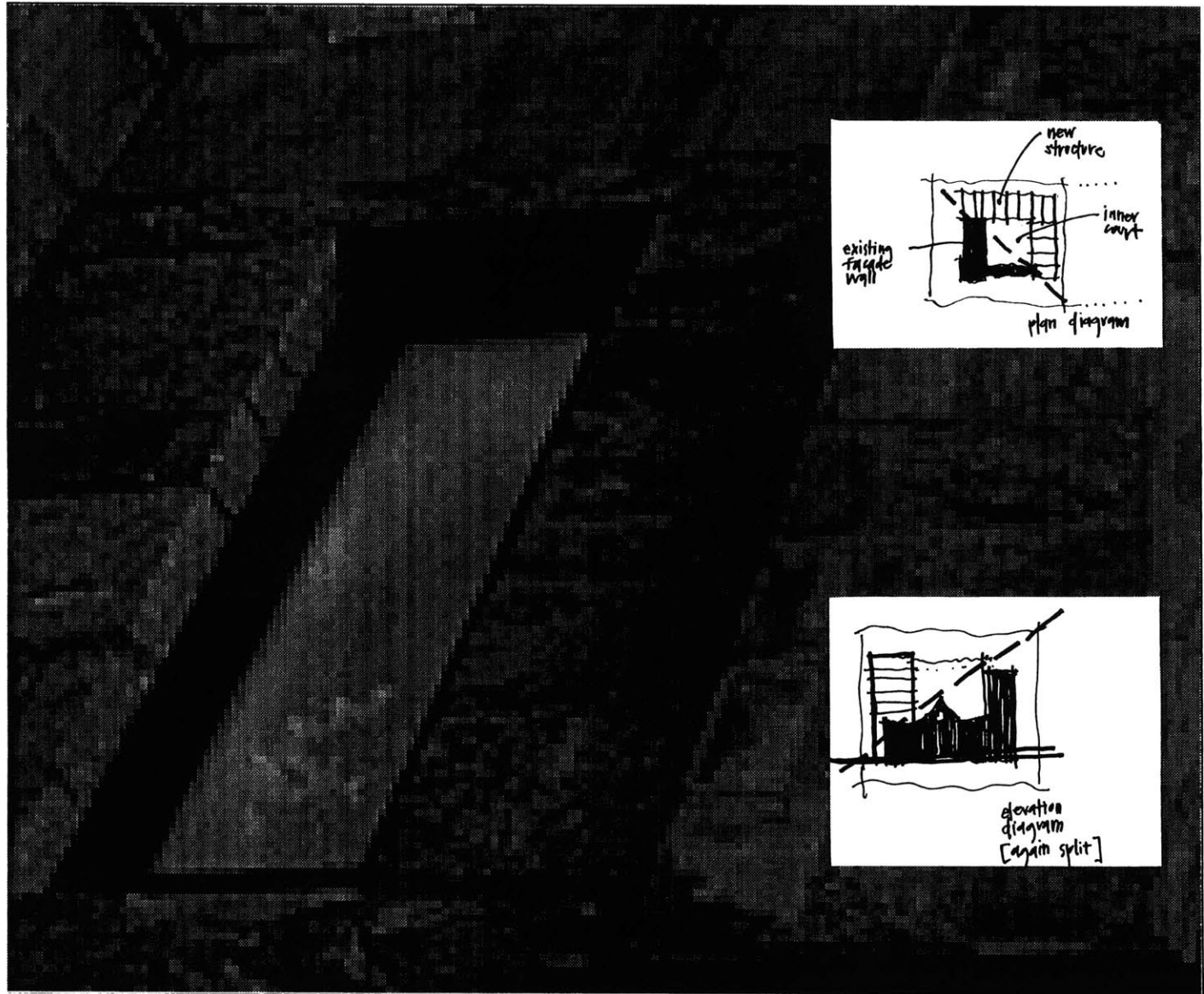
left: View of entry [south side].

above: Site diagram.

borrowing traces of inhabitation as well as physical structure, still evident from the former site.

This pre-existing building fragment offers several possibilities for extension. Beyond the walls of the church there is the large-scale significance of the site itself, providing landmark visibility and importance at the edge of the Back Bay; a role previously provided by a public institution (the church). Internally, there is the possibility to utilize spatial organizations and experiences suggested by the inhabitation (the sanctuary space, wall fenestration and tower).

The condominium units as designed by Gund reinforce the experience of the site as being a gateway into a distinct neighborhood, accomplished through scale as well as material. Recognition of the river side of Church Court as an actual front acts in line with the transformation of Boston. The organization and form of the transformed city are in fact more easily perceivable from the Cambridge side of the river.





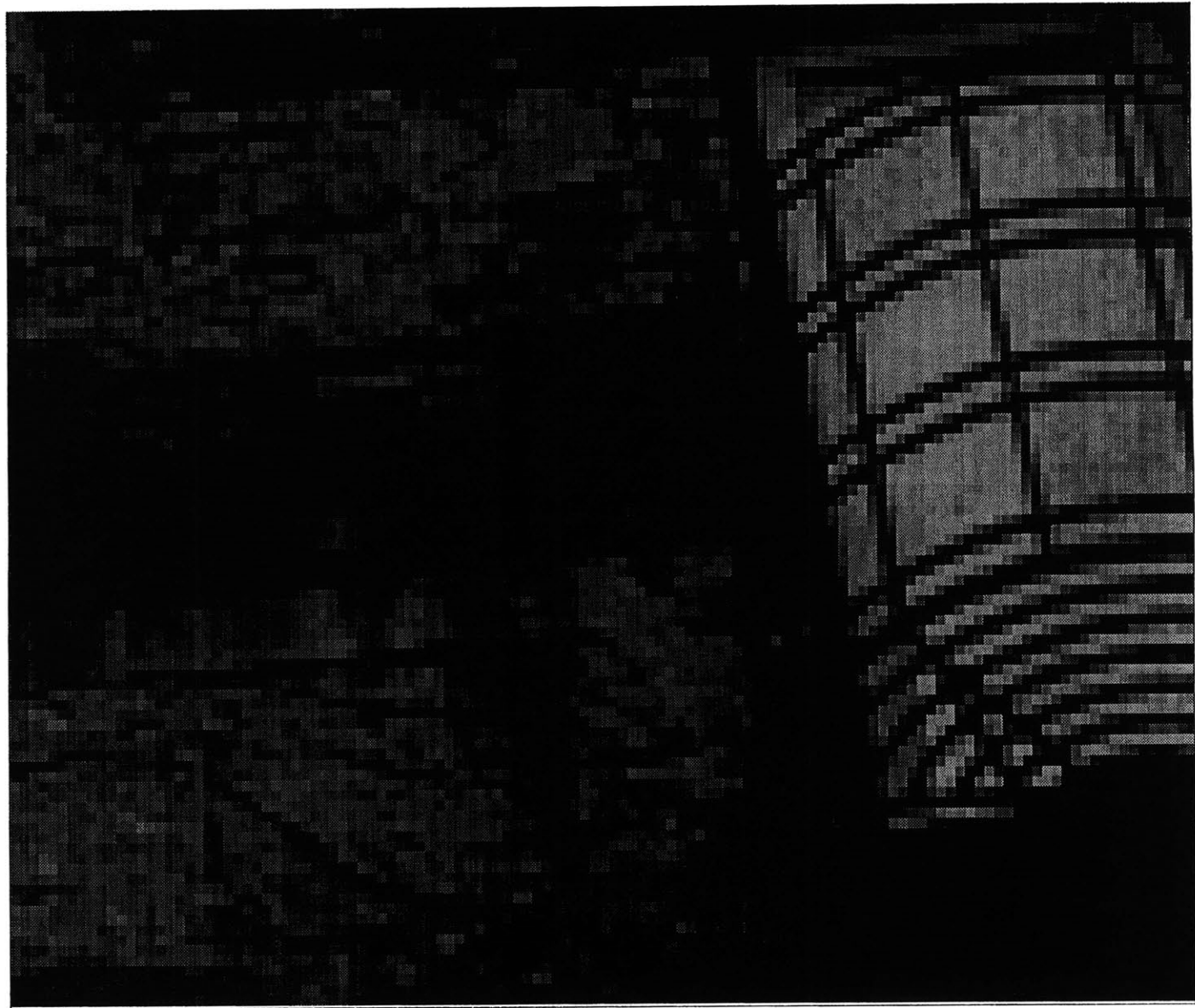
left: Window detail [tower].

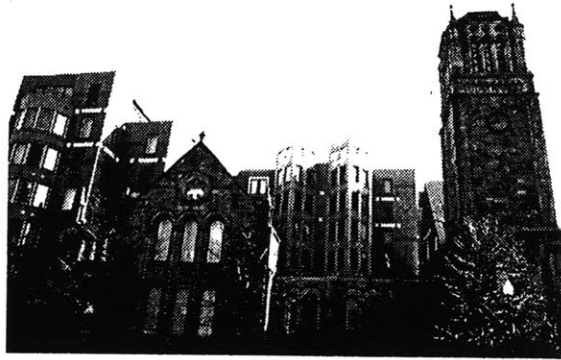
above: New window openings [existing building].

To accomplish this, the units are not individually articulated (as the adjacent townhouses are) but rather unified behind a single gently-curved wall. Material coloration then serves to identify the condominiums, being patterned and lighter in color than their neighbors.

The church walls clearly assume the role of a fortified gate or barrier between the busy public street in front and the residences behind this facade wall, in much the same manner as they fortified and protected the previous church sanctuary. A half-dozen new window openings are allowed to penetrate this heavy stone bearing wall, hinting at the newly-inserted condominiums inside, but the dominant character of isolation from the world is maintained.

The shell of the church then forms a courtyard onto which all the units face, being a remnant of the former sanctuary. Connection between courtyard and street comes at the entrance, where former doorway arches are glazed to allow a view into the area of the sanctuary. This





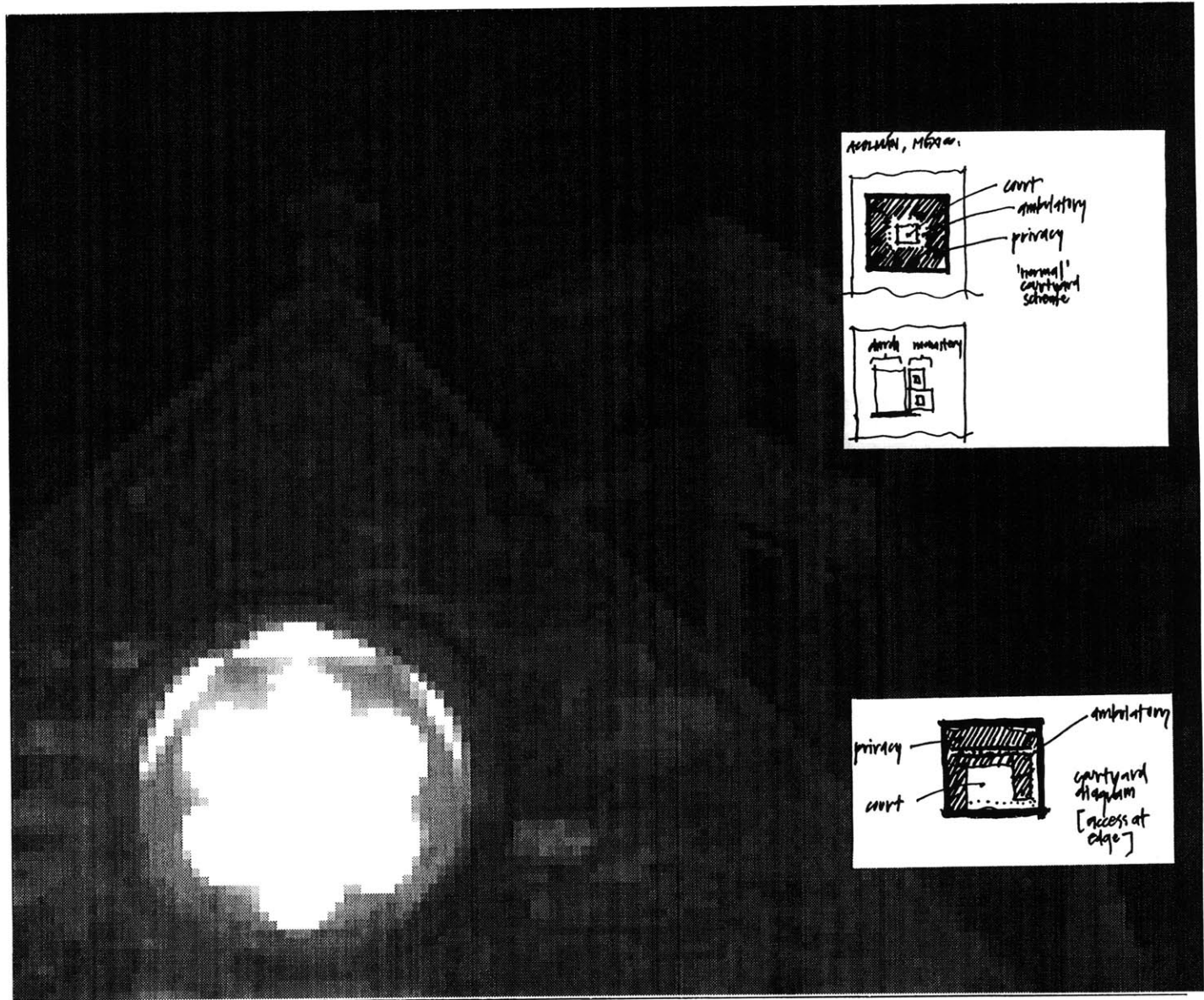
left: Material juxtaposition.

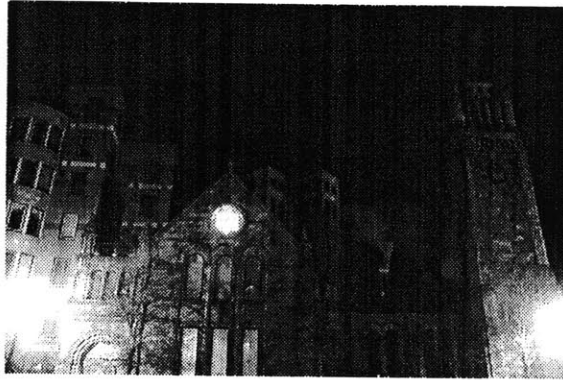
above: West [Mass. Ave.] elevation in daylight.

sanctuary/courtyard governs successive design decisions.

The wall doubles as a zone of inhabitation, not only acting as a separating, two-dimensional enclosure but also providing room for two condominiums, suggested in the sizes and scale of the original fenestration and apse. Stained-glass openings for the sanctuary become openings for smaller-scale units. Light streaming from these sanctuary windows at night underscores the transposition of function from church to dwelling by suggesting the building's alternative (former) use.

Additionally, the church facade masks the newer structure behind it. The church fragment is left largely disengaged from its converted use, and by maintaining this distinction between both 'halves', the parent use is left obvious. No elements of the vocabulary used to construct the pre-existent structure occurs in the new units. Coloration enhances this foreground-background effect. The intense orange of Gund's new



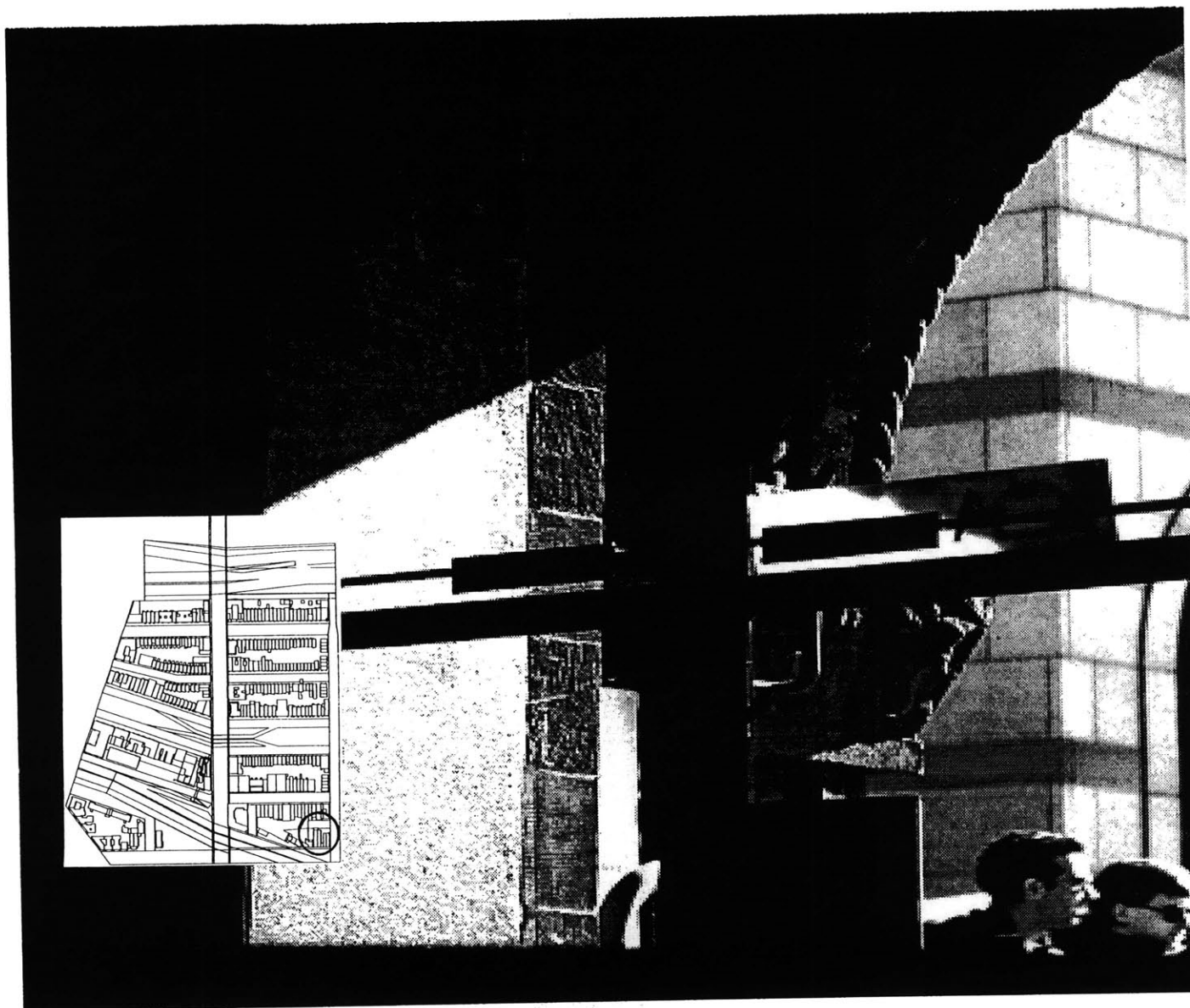


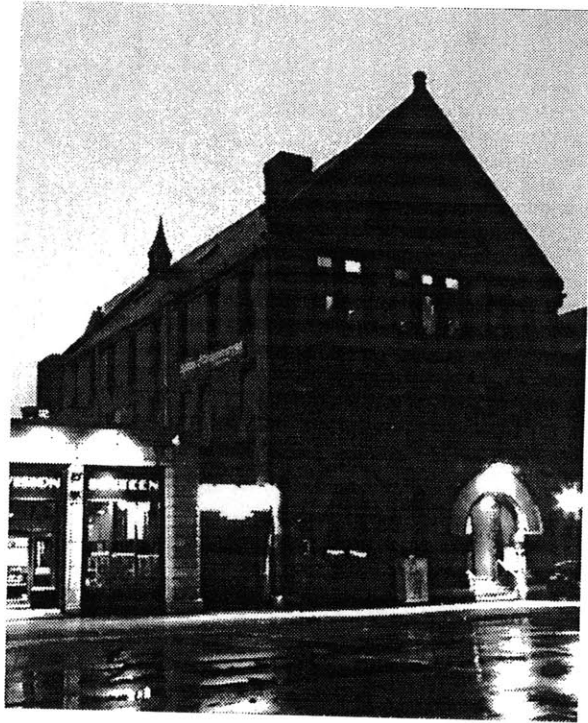
condominiums leaps out above the dull, weathered grey which marks the artifact. Such an obvious material quality allows no mistaking the age separation.

Incorporation of the church fragment enriches the design through recognized transposition of inhabitation. A radical alteration is performed while acknowledging both old and new structures.

left: Rosette window detail.

above: West [Mass. Ave.] elevation at night.





left: Pedestrians walking past the entrance to the I.C.A.

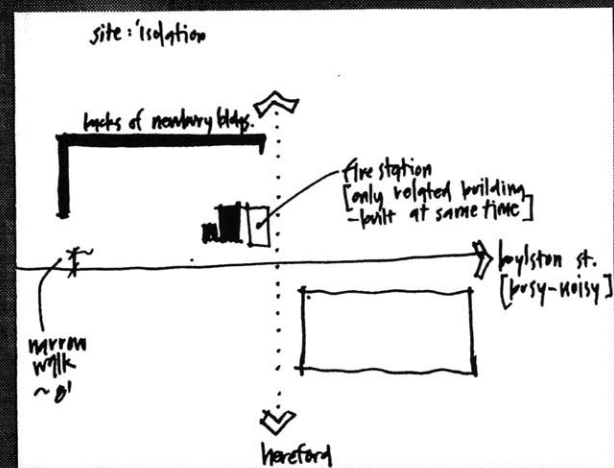
above: South [Boylston Street] and west elevations of the I.C.A.

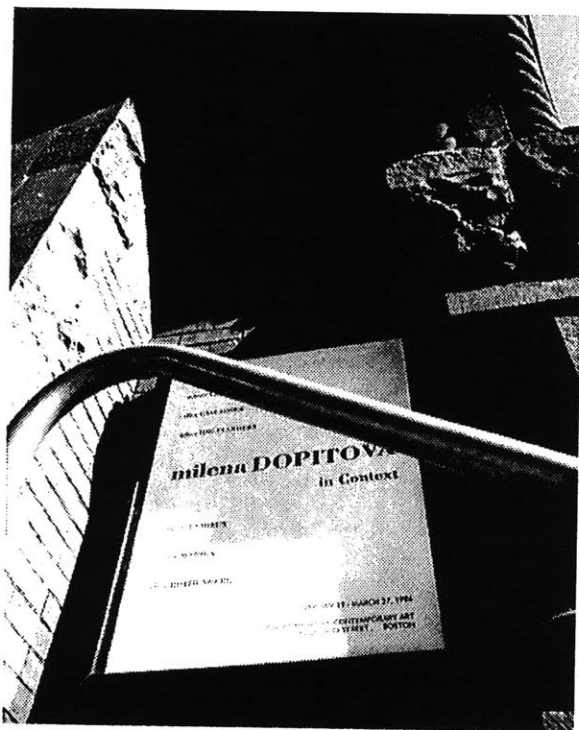
Institute of Contemporary Art, Boston

The Institute of Contemporary Art [I.C.A.] converts a combined fire station and police station into a museum, theater and studio space. Designed in 1886 by Arthur Vinal, 955 Boylston was renovated by Graham Gund [once again] in 1975.

Located near the corner of Boylston and Hereford Streets, the I.C.A. has a very isolated quality, primarily because there are no buildings of a similar scale or form to answer it on the opposite side of Boylston Street. The width of Boylston and menacing traffic also contribute. This condition of isolation is accentuated by the fact that the building's backdrop, separated by a sunken alleyway, is the backside of the old stable buildings along Newbury Street. Taken along with the perceivable scale change of the newer introductions of the Mass Pike, 360 Newbury (discussed in the next chapter) and the Hynes Convention Center, I.C.A. becomes a virtual island.

The building, in its unaltered condition presents several opportunities. Like Church Court, I.C.A. lies on yet another perceived border of the Back Bay, the





left: Enlargement of sign on west elevation.

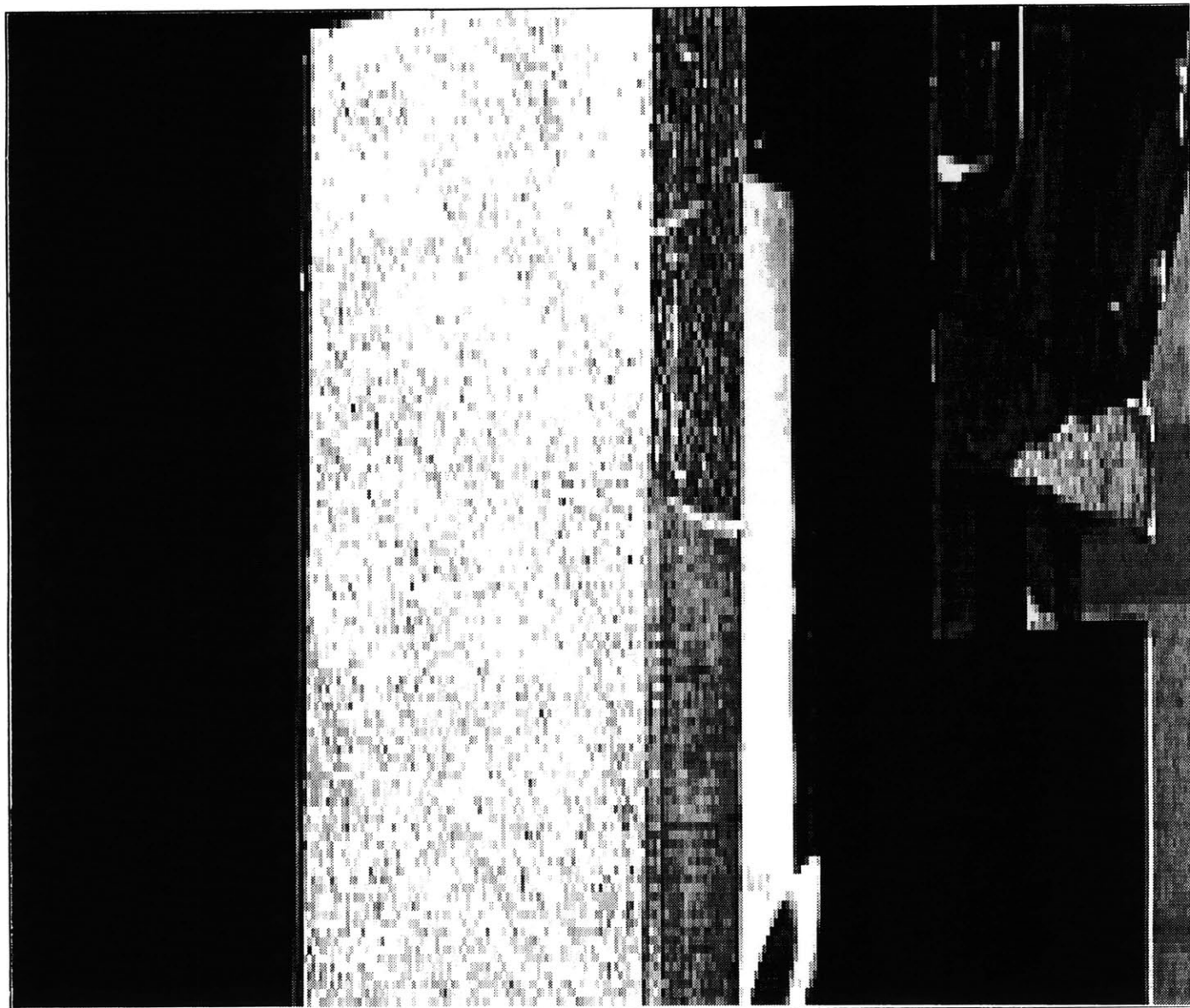
inset: Site diagram.

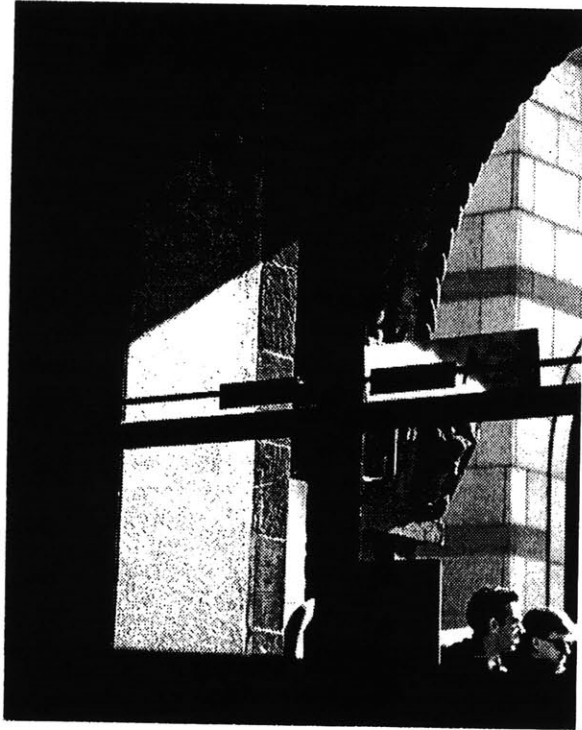
above: Entry archway with sign and handrail.

Massachusetts Turnpike, which crosses directly beneath Boylston Street at this very location. This border position means that I.C.A. marks the transitional edge between scales, materials, and pedestrian/vehicular traffic, past and present. The isolation suggests the potential for prominence of the site, in terms of visibility and larger scale organization of pedestrian movement. Within the envelope, existing inhabitation (space for fire trucks, work and sleep) of the station houses suggest scale differentiation within the building.

The critical problem of the Gund redesign is that the pre-existing building serves to withdraw the program from its context within the community. Nowhere is the existing building allowed to engage the gallery in a direct material sense, nor can the gallery impact on the public world outside. Instead acknowledgement that the two act in concert is apparent only at the entrance, where one passes through the threshold between public street and gallery, dead skin and new life.

There is a lack of interaction between what could be considered in this case to be three spheres of alternating temporal context. These spheres are the





left: Enlargement of material transition at entrance.

above: Full entry photo showing entry arch and layers of material between facade and interior.

neighborhood context within the city. One consists of large-scale structures (Hynes, Prudential) built up of newer materials structured to citywide pedestrian and vehicular access. Another is the context of the building itself, consisting in this design solely as the outermost skin. Then there is the context of the program on the inside. Gund literally covers up the potential to directly and simultaneously experience the existing building and the new program inside.

Perhaps the museum's role as educator justifies the insular mode of separation from the outside world, allowing complete, undistracted immersion in the gallery. Certainly retention of the Romanesque form was meant to lend a degree of permanence to the previously nomadic museum. The redesign, however, crystallizes the lack of participation between the museum and the city, as evidenced by the minimal gesture (through the skin at the entrance) in resolving the transition between the two worlds. This textural change in material vividly belies the treatment of the museum as an island of altered reality (for precisely controlled exhibits) within the chaotic noise and unrelenting high-speed traffic outside its boundaries.

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left: View into galleries from entrance lobby.

inset: Section diagram

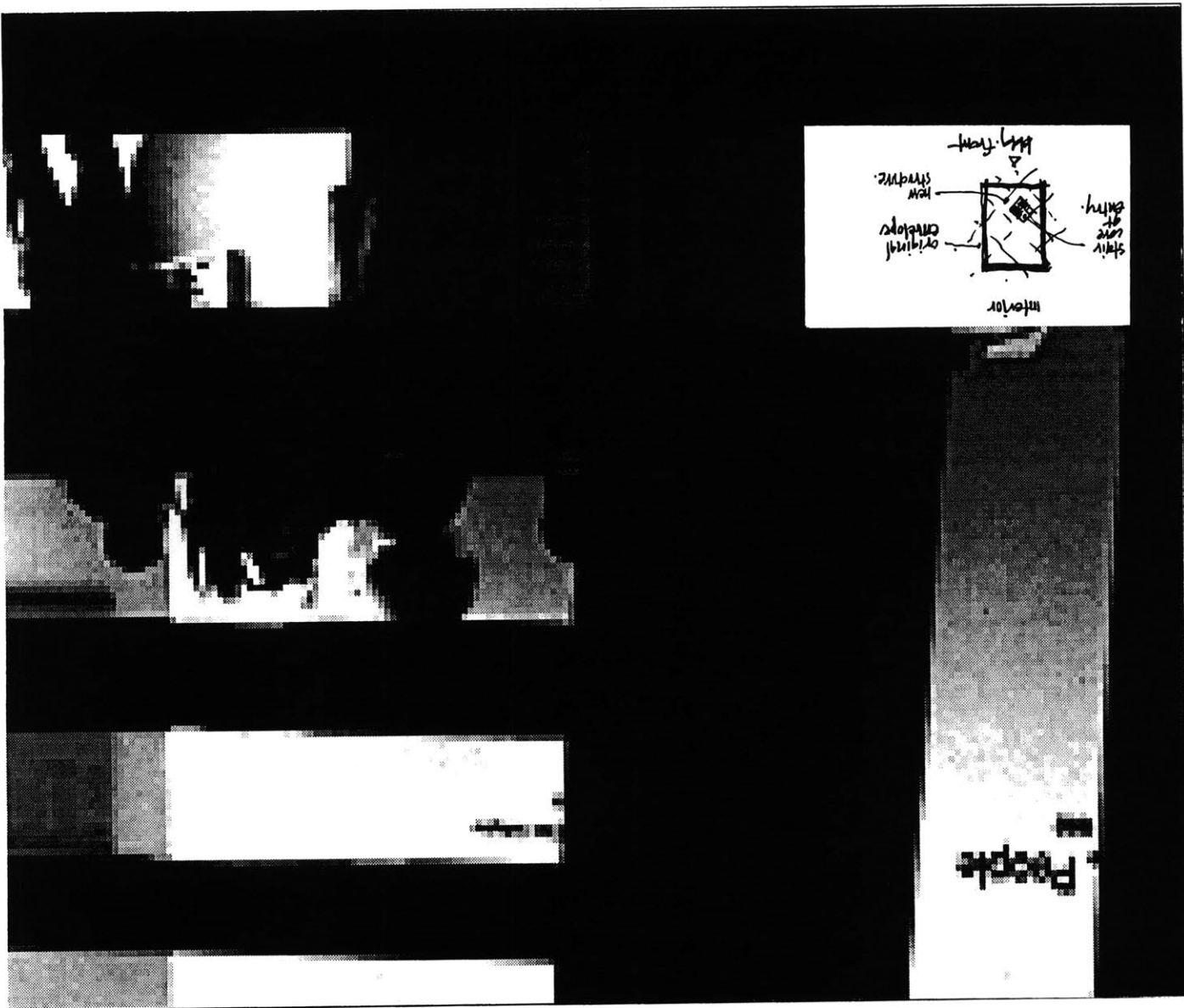
above: View toward lobby from stair.

It does not, however, suggest any potential balance between both sets of conditions.

This segregation of context follows in a similar manner on the inside the building as well. Within the museum, inhabitation of the former building is always made distinct from inhabitation of the museum, although these two could have potentially occupied the same space. For one, the original structure is covered up while the addition of several lighter steel props acting to support the galleries are allowed to show. Gone are the firetruck spaces of the station. Instead the new galleries exhibit only traces of the previous inhabitation, through the scale of spaces defined by boundary walls between galleries, and in the organization of the galleries on the ground level as a linear extension of the archway entry.

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Continuity is further diminished by the segregation of material and the removal of natural light. A homogeneous layer of drywall and wood veneer clads the public gallery spaces, in a way embalming or preserving the building from the interior. This surface masking in effect denies the experience of the building's former existence. Rather, any interactive





left: Enlarged view through stair of lobby desk.

inset: Plan diagram.

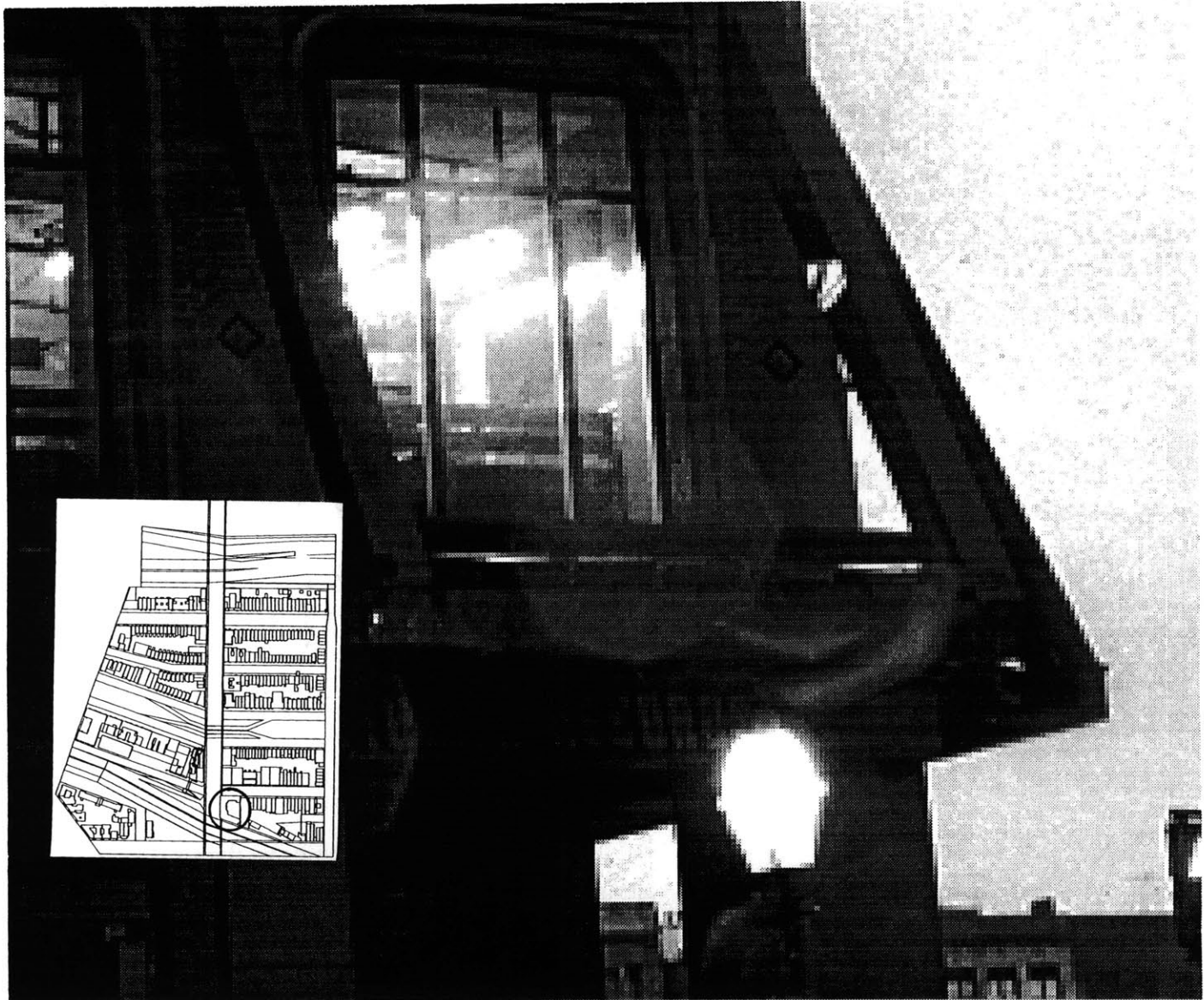
above: View of lobby desk and upper gallery from stair.

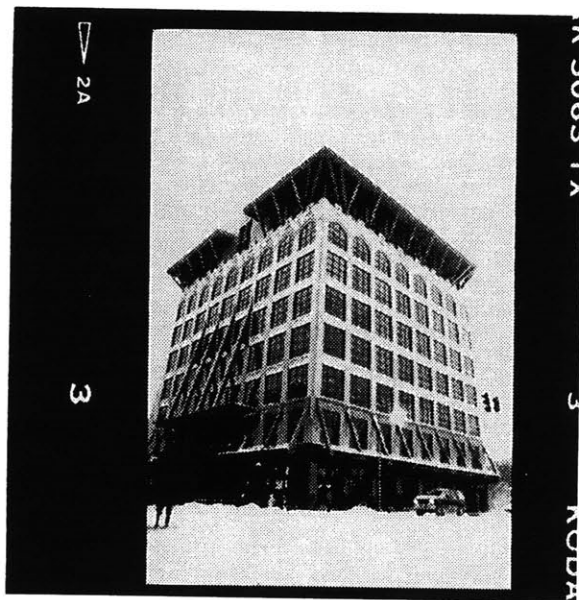
richness inherent to simultaneity is squandered to make way for pure preservation or pure museum. The additional lack of natural light makes the entry condition so critical, yet here there is only a view through the skin of the evolving outside world.

The new structure of the museum separates the galleries from the building envelope. Shifted at nearly a 45° angle, the orientation of the upper level exhibit spaces removes the viewer from the outer wall. Juxtaposition of support struts and covered-up fenestration only call attention to the effort to segregate the two worlds of inhabitation.

In the case of I.C.A., design isolates the interior life from the exterior one, in the process completely wiping out the potential for even minimal association between the two (which might have been mediated through the envelope). The preservation of the exterior as an artifact lends itself to identification of the pre-existent structure as an element out of time and lends a certain permanence to the building's occupant. However, the design ultimately distances this artifact from direct association with the city fabric.

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left: Corner entrance to building from Newbury Street and Massachusetts Avenue [northwest corner].

above: View showing north and west elevations [entrance at center bottom].

360 Newbury Street

360 Newbury Street (known more familiarly as the Tower Records Building) on the corner of Newbury Street and Massachusetts Avenue is another example of transformation. The site was initially occupied by a four-story livery building, supplying stables on Newbury Street between Hereford Street and Mass. Ave. The livery was in turn supplanted in 1918 by a higher-density seven-floor warehouse building, designed to connect with the Albany Railroad which ran along the southern side of the building. During the time of the warehouse's construction up until the initiation of the Massachusetts Turnpike project, the site was flanked by similar buildings and by row houses of the Back Bay, completely enfolding the structure. About the time that the railroad adjacent to the site ceased to play a crucial role in the development of the area and the Mass Pike began to dominate, the warehouse function was replaced by offices using the same building envelope.

The changing infrastructure surrounding the building



*left: Enlargement of time-lapse photograph taken
inside Tower Records.*

inset: Site diagram.

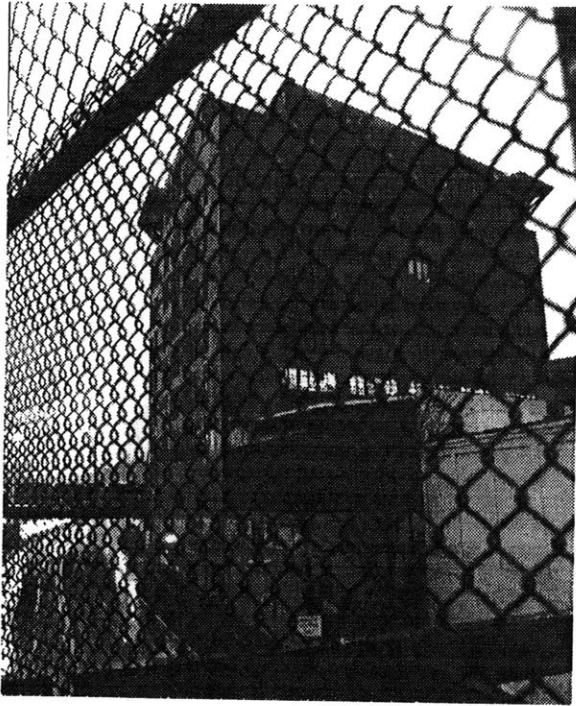
*above: View of south and east elevations from above
the Massachusetts Turnpike.*

caused both internal and external transformations. Demolition of the adjacent structures to make way for the Pike meant exposure of the warehouse to full view where formerly it hid behind its fellows. The concrete walls of the warehouse also began to degrade and deteriorate under exposure to the vibration and pollution of cars in the vicinity. Both public transportation and the highway brought retail development to the area and replaced [at least at the level of the street] private residences along Newbury Street.

The project under examination acknowledges twin forces transforming this portion of the city, one into a public outdoor retail mall, the other into small-scale offices. Located at one of the distinct entry points of Newbury Street, the site represents the face of the entire strip. Due to its proximity to pedestrian traffic (the MBTA and Newbury Street), and because of the full exposure of all four of its sides, the "head" now speaks for what lies behind it, but at a much larger scale and far greater distance than any of its neighbors.

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*left: Pedestrians at the base of 360 Newbury along
Massachusetts Avenue.*

inset: Section diagram.

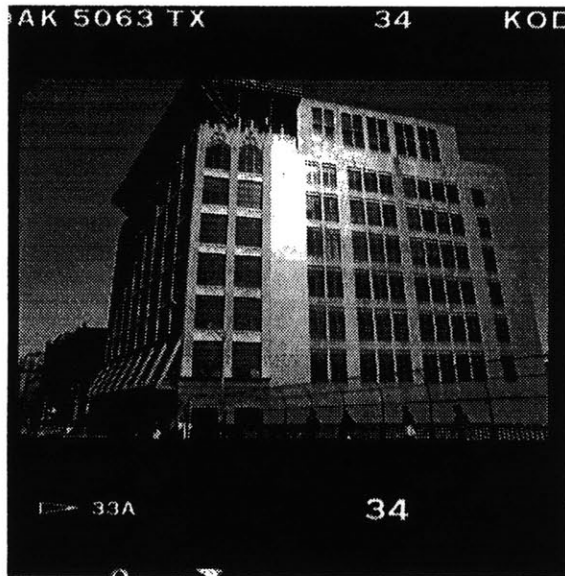
*above: South and east elevations at dusk. Lights at
base are from Tower Records.*

Redesign in 1989 was guided by Richard Cohen's real estate development company, and involved the collaboration of Frank Gehry's firm along with architects Schwartz/Silver in Boston. Besides the additional floor of offices at the top of the building, the lowest three floors were converted to retail space. This conversion represented a distinct departure from the norm along Newbury Street, where only one or two floors had ground level access for retail, but proportionally it lay within the scale of both street edges, having roughly one half of its volume designated for public-access retail use.

On a city-wide scale, then, 360 Newbury represents an effort to deal with the site in terms of its visibility. It can also be seen as an extension of the street-level experience, responding to the forces of pedestrian traffic, as well as continuing the ongoing pattern of street-level openness.

The addition of the eighth floor capitalizes on this aspect of new-found visibility, both on Mass Ave and the Pike. Its aggressive profile is noticable in both directions (along the axes of Mass Ave and the Mass





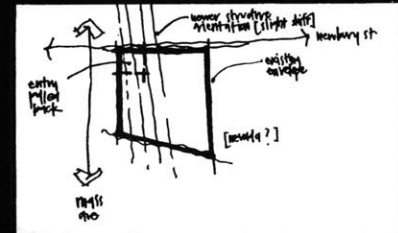
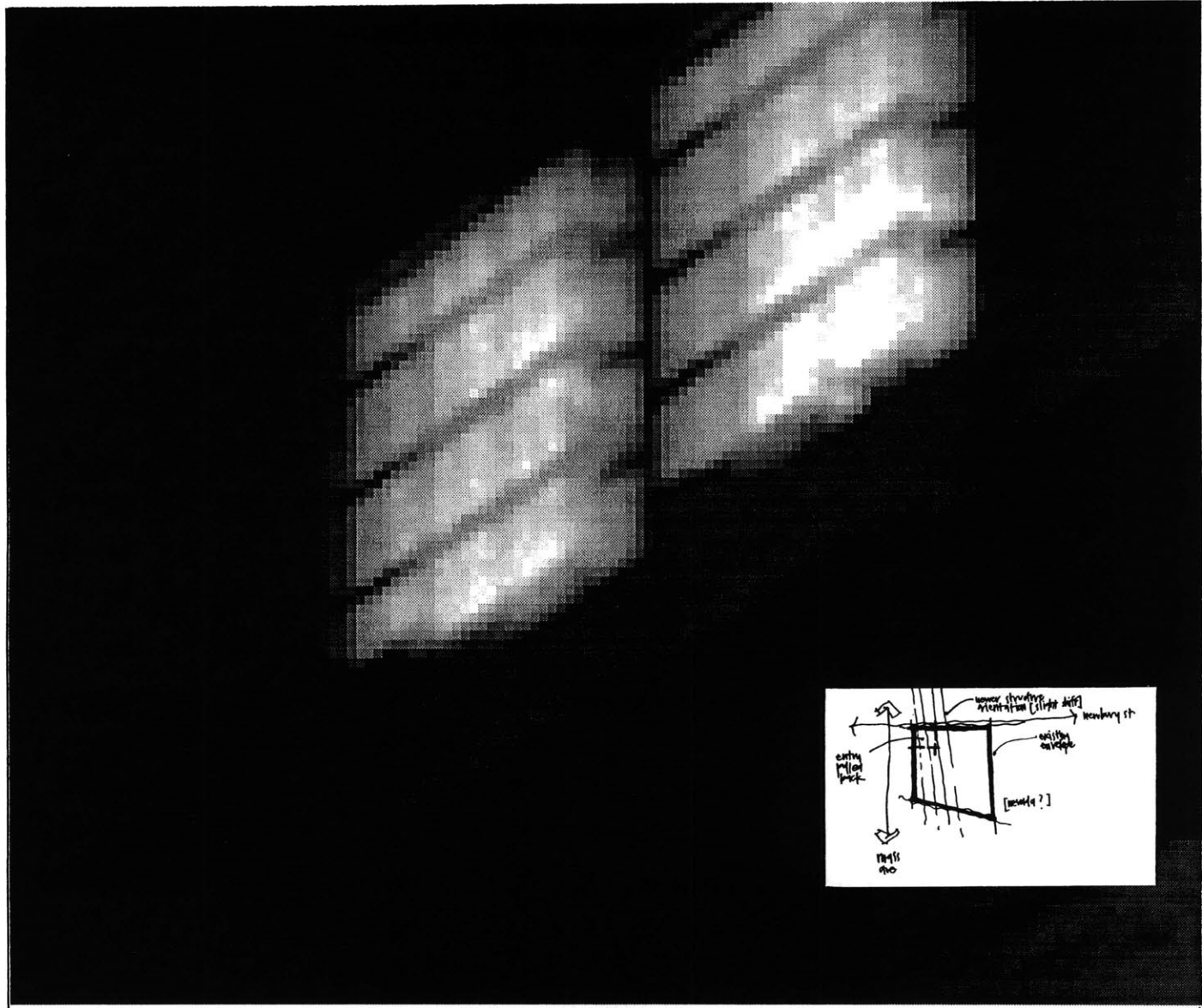
left: Roof canopy enlarged.

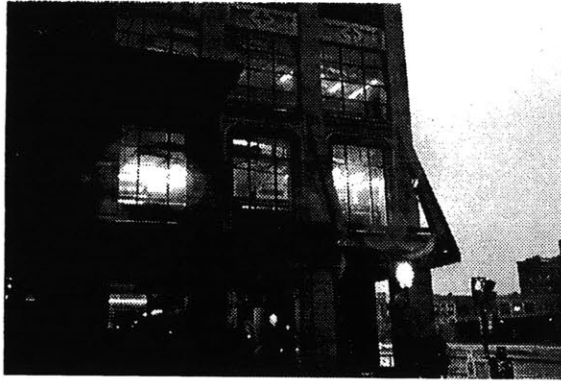
inset: Plan diagram.

above: South elevation looking along Mass. Ave.

Pike-Newbury Street) for at least a mile during the daytime and especially in bright sunlight, increasing the focal quality of the location. Originally, a gigantic tea bag sculpture (Claes Oldenburg, designer) was meant to adorn the southeast corner of the roof, underscoring intentions to exploit the building's presence as a billboard in all directions. The new groupings of the existing windows result in a texture immediately noticable over large-scale distances. Lead-coated copper panels installed to protect the deteriorating exterior intensify this prominence through reflection of sunlight. Taken in combination with the transparent facade, the building is always radiant.

To resume the metaphor of the body, this monumentalized ordinary structure is given a "hat" and "skirt". These elements then interact with the pre-existing building exterior. The "hat" is in fact a sun shield for the upper level of the building, while the "skirt" protects pedestrians at its base from rain and wind. Struts which apparently support these features are again at a scale readily discernible from faraway along both Mass. Ave. and Newbury Street, lower





left: Enlargement of office window at night.

above: Northwest corner showing entrance. Grid shift visible through lighted window above.

level supports radiating from a height two floors above the canopy.

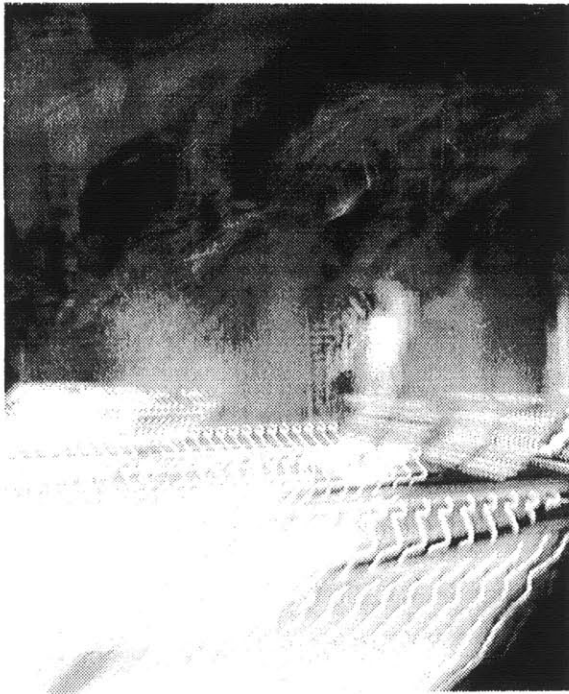
Prior inhabitation influences the site in two ways. First, the stripping of internal parts has nevertheless exposed the fenestration sizes of the wall, which in turn dominate the design of the offices. Second, the horizontal stacking of the spaces continues, marking distinct zones of inhabitation within the building.

To call attention to the difference between the retail function and the offices above, and to mark the inclusion of the retail space with the public street, the gridded geometry of retail spaces is angled slightly, distinguishing between old and new and calling attention to the juxtaposition of both. This effect is enhanced at night (when the building's retail function is in full force) and lights from the building serve to attract passersby.

360 Newbury leaves an indelible impression of its metamorphosis on the collective memory of the city; the most marked understanding of the designers was that of appearance. However, one must not discount

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left: One solitary office remains occupied at night.

above: Time-lapse photograph of retail interior.

the actual continuation of the previous inhabitation within the context of the social reality of ongoing public retail spaces. Nevertheless, the site is a real focal point in the transformed city, and effectively continues the pattern of use, while densifying the scale, in line with urban forces. This fact justifies the union of a pre-existent structure with a new program. There is also the mediation of new and old as exhibited by the overlap and simultaneity of the two independent structures, one to hold up the building, the other to organize the unfolding experience. All these features, including the presence of the newer elements, clarify the role of the site and enhance the physical scale of its presence.

Conclusion

What ultimately occurs in the design process is something that cannot be predicted from the outset. This thesis has presented several projects, and yet the design has seemingly taken off in a completely different direction. For temporal transformation to work successfully, one must understand the context within which one designs. That moment of understanding then allows for metamorphosis: incorporating what already exists, transforming the significance of those artifacts, and then finally exploring new directions. Limitations become opportunities. This is the true nature of evolution.



*above: View through rosette window at Sagrada
Família, Gaudi.*

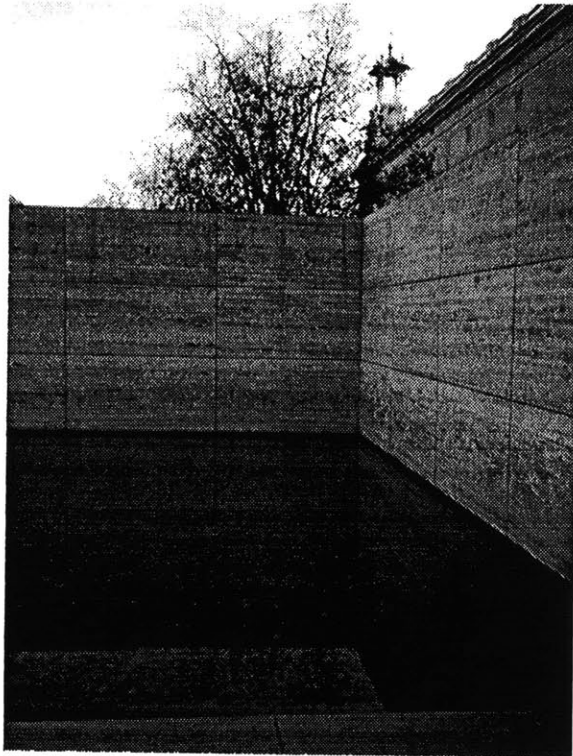
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above: Pool at edge of Olympic Village.

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above: Reflecting pool at 1929 Barcelona Pavillion.



above: Street in La Rambla.

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